16 PAGES in FULL COLOR

POPULAR

PHOTOGRAPHY

WORLD'S LEADING PHOTOGRAPHIC MAGAZINE

SEPTEMBER, 1955
35 CENTS

COLOR—
an exciting special issue

TIPS ON OUTDOOR FIGURE STUDIES

DRAMATIC LANDSCAPES

STOP ACTION IN COLOR

MAKE A HIT WITH YOUR SLIDE SHOWS

Get better color

Ask for High-Speed **ANSCOCHROME**

ANSCO · Binghamton, N. Y. A Division of General Aniline & Film Corporation. *"From Research to Reality."*

with your present camera with

NEW ~~HIGH-SPEED~~

ANSCOCHROME FILM

1 You'll get sharper pictures of fast-moving action with high-speed Anscochrome, because you can use higher shutter speeds to "freeze" action, and smaller lens openings for greater depth of field. (Illustration made at 1/500-second f5.6 in bright sunlight.)

2 No super-speed lens needed for Anscochrome transparencies under dim light conditions like these! Because Anscochrome is *three times faster* it lets an f3.5 lens get fully exposed pictures that would call for an f2.0 opening with old-style color film! (Illustration made with fading daylight at 1/50-second, f4.0).

3 You get better flash pictures with blue bulbs because the extra speed and wide latitude of new Anscochrome film carry the color right into the shadows, and greatly increase the effectiveness of your flashbulb. (Illustration made with 5B blue bulb using a guide number of 95.)

In 120, 620 and 828 eight-exposure rolls, standard 35mm magazines and in bulk in the money-saving 35mm Easy-Loader.

the new color film for all popular cameras!

Remember:

Anscochrome gives you positive film transparencies that let you see the color clearly, brilliantly—just as your camera caught it. You can process Anscochrome and make natural color Printon prints in your own darkroom. Or your dealer can give you prompt and inexpensive service through the Ansco color finisher near you.

No Other Miniature Gives You Exclusive Push-Button Focusing and *All These Features!*

Own a *Graphic*® 35

ONLY $89.50

COMPLETE WITH LEATHER CASE AND FLASH

The Graphic 35 is the *only* camera with Push-Button Focusing. It's fast and accurate . . . just press the buttons (1) to align the split-image, coupled rangefinder. Handy shutter release lever (2) is right at your fingertips.

Spectramatic Flash Settings (3) help you get accurate color flash exposures quickly, help you select the correct lens setting instantly, without confusing calculation or complicated charts.

Other important features include: full 50mm. Graflar f/3.5 color-corrected and coated lens (4); full flash synchronization at all shutter speeds (5); depth of field scale and Visi-Ready footage scale (6); die-cast all-metal body construction (7); satin-chrome finish and (8) diamond-turned controls. Let your Graflex dealer demonstrate this modern camera.

Prices include federal tax where applicable and are subject to change without notice.

GRAFLEX®

GRAFLEX, INC. ROCHESTER 8, N. Y.

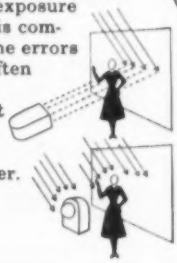
Prize-Winning Cameras

Graflex Dealers are in the 'Yellow Pages'

$32.95

. . . for complete **VERSATILITY**

EXACT EXPOSURE IS A MUST if your photograph is to reproduce faithfully *all* the tones in the scene. And the easiest, *best* way to be sure of exact exposure is to use an exposure meter designed to measure the *right* light – the *incident* light that falls *on* the subject. Incident light measurement gives better exposure control because it is completely free from the errors (and difficulties) often encountered in measuring the light *reflected* by the subject, with a reflected light meter.



the BROCKWAY

Trade Mark

m-2 model

NORWOOD *Director*

EXPOSURE METER

Trade Mark

"The Standard of the Studios"

World-famous among professional and amateur photographers for complete versatility and absolute accuracy – and the choice of Hollywood's leading motion picture photographers for the past eight years. Measures entire useful light range. Head rotates so that scale always faces you. For movies and stills, color and black and white. Reads from f/1.4 to f/45 in 1/3 stops. Direct reading with Kodachrome movies and stills . . . with other films by accessory slides. Photogrid for brightness range control, Photodisk for balancing sunlight-flash or studio lights.

. . . for ultimate **SIMPLICITY**

the new direct reading

BROCKWAY

Trade Mark

m-3 model

NORWOOD *Director*

EXPOSURE METER

Trade Mark

Absolute simplicity combined with true incident light accuracy. Simply point the M-3 and read f/stop directly! For movies and stills, color, black and white, Polaroid. Extremely compact, weighs less than two ounces, clips on your pocket like a pencil. Reads full stops from f/1.4 to f/16, and Polaroid numbers. Comes with two slides for Kodachrome movies and stills . . . other slides for all popular film and shutter speed combinations available at your dealer's.

$16.95

With Brockway incident light-measuring exposure meters, there's no need to "compensate" for background reflection . . . no need to tilt the meter . . . no "averaging" or guesswork. The incident light falling *on* the subject – which actually *determines* exposure – is collected and integrated by the exclusive three-dimensional Photosphere. Brockway exposure meters measure the *entire* light range, and instantly indicate the exact midpoint for perfect exposure. They are the *only* meters *specifically made* to measure incident light, the *right* light for the right exposure.

BROCKWAY

EXPOSURE METERS

Measure the Right Light

Write for free folder describing the Brockway M-2 and M-3 Models of the Norwood Director Exposure Meter. Brockway Director Corporation, Sales Office 570 Fifth Avenue, New York 36, N.Y., Factory and Service Dept., Stark Street, Manchester, New Hampshire.

BROCKWAY
EXPOSURE METERS
MEASURE THE RIGHT LIGHT

An Affiliate of Marion Electrical Instrument Company

POPULAR PHOTOGRAPHY is published monthly by the Ziff-Davis Publishing Company, William B. Ziff, Chairman of the Board (1946-1953), at 64 E. Lake St., Chicago 1, Ill. Entered as second-class matter July 30, 1937, at the Post Office, Chicago Ill., under the act of March 3, 1879. Authorized by the Post Office Department, Ottawa, Canada, as second-class matter. SUBSCRIPTION RATES: One year, U. S., and Possessions and Canada $4.00; Pan-American Union Countries $4.50; all other foreign countries $5.00.

SEPTEMBER 1955

VOLUME 37 NUMBER 3

POPULAR PHOTOGRAPHY®

including CAMERA and AMERICAN PHOTOGRAPHY

WORLD'S LEADING PHOTOGRAPHIC MAGAZINE

In a field known for its rarity of serious women practitioners, Sharland has become one of the most successful fashion photographers in the business. She took this picture of red-head Elsa Martinelli with a single-lens-reflex press camera, the 4 x 5 Graflex D, fitted with an 8½-in Ektar f/6.3 lens. Using Ektachrome Daylight film, and electronic flash lighting in her studio, the exposure was made at f/8.

POPULAR PHOTOGRAPHY SPECIAL COLOR ISSUE

61 The Future of Color Photography *by Bruce Downes*
62 Why Color?
64 Sidewalk Studio *by Murray Zinn*
66 Landscapes around the Clock
70 Stage a Tabletop *by John Devol*
72 Four Ways to Shoot Color Indoors *by Arthur Goldsmith*
76 Slide Showmanship *by Robert L. McIntyre*
78 Fred Smith: the Nude Outdoors *by Michael Aleshire*
80 Pictures from Our Readers
86 Action Photographs *by Marvin E. Newman*
88 Berko's Barns *photographs by Ferenc Berko*
90 New Ways with Photograms *by Otto Bayer*

PICTURE FEATURE
94 A Round-up of Recent Prize Winners

FOR THE BEGINNER
98 You Can Take Good Outdoor Pictures in Sunlight *by Joseph Foldes*

EXPOSURE
100 Neutral Gray Card *by Lloyd West*

MOVIES
106 A Talk with Stanley Kramer *by John Durniak*
108 Revolutionary Amateur Movie Film *by Allan Green*

EQUIPMENT AND MATERIALS
112 Neoprene—a Helpful Darkroom Aid

DEPARTMENTS
8 Letters to the Editor
12 Tools and Techniques *by Norman C. Lipton*
28 Camera Clubs *by Whit Hillyer*
38 Stereo Today *by Robert L. McIntyre*
42 Color Clinic *by David B. Eisendrath, Jr.*
48 35-mm Today *by Bob Schwalberg*
54 Legal Problems in Photography *by George Chernoff and Hershel B. Sarbin*
58 Candid Shots
104 New Books
119 Contests and Markets
120 Calendar of Exhibitions
122 Photo Tips
124 What's New—Trade Notes and News

SUBSCRIPTION SERVICE: All subscription correspondence should be addressed to Circulation Dept., 64 E. Lake Street, Chicago 1, Ill. Please allow at least 4 weeks for change of address. Include your old address as well as new—enclosing if possible an address label from a recent issue of this magazine.

CONTRIBUTIONS: Contributors are advised to retain a copy of their manuscripts and illustrations. Contributions should be mailed to the New York Editorial Office and must be accompanied by return postage. Contributions will be handled with reasonable care, but this magazine assumes no responsibility for their safety. Any copy accepted is subject to whatever adaptations and revisions are necessary to meet the requirements of this publication. Payment covers all author's, contributor's and contestant's rights, title, and interest in and to the material accepted and will be made at our current rates upon acceptance. All photos and drawings will be considered as part of the material purchased.

Copyright 1955 by Ziff-Davis Publishing Company. All rights reserved.

Editor
BRUCE DOWNES

Managing Editor
NORMAN C. LIPTON

Art Director
ALBERT GRUEN

Features Editor
ARTHUR GOLDSMITH

Associate Editors
MARGARET CHURCH, JOHN DURNIAK, H. M. KENZER, CAROL MILLER SMITH, E. V. WENZELL

Art Editor
AILEEN HUNT

Art Associate
ANDREW V. WAHLBERG

Assistant Editors
MICHAEL ALESHIRE
JOSEPH P. FESCE

Contributing Editor
BOB SCHWALBERG

British Correspondent
GEORGE ASHTON

Advertising Director
MICHAEL H. FROELICH

Advertising Manager
WILLIAM F. HAZLETT

ZIFF-DAVIS PUBLISHING CO.
WILLIAM B. ZIFF (1898-1953) Founder
EDITORIAL AND EXECUTIVE OFFICES
366 Madison Ave.
New York 17, N.Y.

B. G. Davis
President

Vice Presidents:
H. J. Morganroth,
Michael H. Froelich

Secretary-Treasurer:
George Carney

Circulation Manager
Michael Michaelson

Member
Audit Bureau of
Circulations

POPULAR PHOTOGRAPHY, including PHOTOGRAPHY, Trade Mark Registered. Combined with Amateur Cinematography and Prize Photography Magazine, formerly Everyday Photography.

BRANCH OFFICES: Chicago Office, 64 E. Lake St., Chicago 1, Ill.; Los Angeles Office, Jack Edwards, Statler Center, 900 Wilshire Blvd., Los Angeles 17, Calif.

PRICE WAR

EACH & EVERY ITEM EACH & EVERY PRICE

CASH or TRADE ONLY 10% DOWN

YES . . . . . YOUR CREDIT'S GOOD at STERLING-HOWARD

Only 10% down (or $5.00; note second column) and any camera you want is yours—on our EASY BUDGET PLAN. Pay the balance in CONVENIENT PAYMENTS (practically name your own terms). Send check, cash or money order; include note with age, occupation, 3 references. All in listing used; subject prior sale. Add $1.00 postage & insurance each camera order.

SAVE 58.50!
REFLEX 66
2¼ x 2¼ single lens reflex with sync & f3.5 coated lens. Value $135.00.
BRAND NEW . . . **79.50**
Deluxe case 8.50 1.80 Post. & Ins.

4 x 5 B & J SPEED PRESS CAMERA
$215.00 value with 6" f4.5 Steinheil Unofokal in Compur Synchro Press, Rangefinder and flashgun.
BRAND NEW **135.95**
Case 9.95 1.85 Post. & Ins.

EXAKTA FINDER
Brand-new eye-level prism finder; fits all Exakta V, VX's and EXA's; price can't be beat.
BRAND NEW . . . **27.50**
Case 2.50 45c Post. & Ins.

unexcelled value!
PRAKTICA — SYNCHRO
f2.9 COATED LENS
foc plane speeds 1/2 to 1/500; Sync. **48.00**
Case 7.95
1.25 Post. & Ins.

ASTRAFLEX '35
f2.8 TESSAR preset OR f1.9 MEYER ctd plus CASE, plus FLASHGUN, plus 130mm f5.5 Tele-Astra lens in pre-set diaphragm. ZEISS PRISMASCOPE Bulb & Strobe Sync.

	Reg price	special
Camera & lens	299.75	89.50
Leather case	15.00	9.75
DeLuxe Flashgun	12.00	8.50
Tele-Astra lens	69.50	49.00
Total (ALL NEW!)	396.25	156.75

1.85 post & ins
Sorry, we do not break the combo. Must be ordered as a unit.

BINOCULARS
All coated optics, indiv. eye focusing! All-metal; lite wt.
16 x 50 **29.95***
7 x 50 **20.95***
Genuine leather case 6.95
1.25 Post. & Ins.
*Add 10% Fed. Ex. Tax

If You Wish, Pay Only 10% Down.

35mm CAMERAS

Argus C, f3.5	12.50	5.00
Argus C-4, f2.8 CRF M-X Sync	44.50	5.00
Bolsey B-2, f3.2 ctd case & flash	29.50	5.00
Bolsey B-22, f3.2 ctd	35.00	5.00
Bolsey C-22, f3.2 ctd Sync	67.50	6.75
Clarus, f2.8, coated RF	36.00	5.00
Contax D, f2 Biotar	93.00	9.30
Contessa, f2.8 Tessar, CRF	84.00	8.40
Contaflex, f2.8 Tessar Sync	84.50	8.45
Contax I, f2 Sonnar	57.50	5.75
Contax II, f2 Sonnar	107.50	10.75
Contax IIA, f1.5 Sonnar	187.50	18.75
Contax IIIA, f2 Sonnar	192.50	19.25
Leica IIIC, f3.5 Elmar	91.50	9.15
Leica IIIC, f2 Summitar	122.95	12.30
Leica IIIF, f2 Summitar	145.95	14.60
Leica IIIF, f1.5 Summarit	194.50	19.45
Exa f2.8 ctd, Sync	44.95	5.00
Kodak Retina III-C f2 ctd RF	116.00	11.60
Kodak Retina IIa, f2 ctd XM	70.75	7.10
Kodak 35, f4.5	19.95	5.00
Kodak 135, f4.5	17.00	5.00
Kodak Town & Country, f3.9 RF, case & flash	48.00	4.80

REFLEX CAMERAS

Ciroflex D, f3.5 ctd Sync	46.00	5.00
Flexaret, f3.5 ctd	37.50	5.00
Graflex 22 f3.5 Sync	46.00	5.00
Ikoflex Ia	57.00	5.70
Ikoflex IIa, f3.5 Tessar Sync	73.50	7.30
Kodak Reflex II, ctd f3.5 Sync	56.50	5.65
Korelle Reflex II, f2.8 Tessar	69.50	6.95
Primar-Reflex II, f3.5 ctd Tessar	119.50	11.95
Richoflex, f3.5 ctd Sync	21.95	5.00
Rolleicord, f4.5 Triotar	38.50	5.00
Rolleicord III, f3.5 ctd Xenar, Sync	66.50	6.65
Rolleiflex, Auto f3.5 Tessar Solenoid	115.00	11.50
Rolleiflex, Auto III, f3.5 Tessar	153.00	15.30
Rolleiflex, Auto f3.5 ctd Xenar	77.50	7.75
Rolleiflex, Auto f3.5 Tessar	88.50	8.85
Voigtlander Brilliant, f3.5 ctd	27.50	5.00

VIEW CAMERAS

4x5 Korona View	59.50	5.95
4x5 Grover Mono Rail	59.50	5.95
5x7 B&J Comm View	50.50	5.05
5x7 Rembrandt, Div back	72.00	7.20
5x7 Grover Mono Rail	72.00	7.20
8x10 Adorama Commercial	109.50	10.95
8x10 B&J Comm View	69.95	6.99
8x10 Grover Mono Rail	89.50	

PRESS CAMERAS

2¼x3¼ PRESS CAMERAS

Ann Speed Graphic, f4.5 KRF Synchro Flashgun	83.50	8.35
Busch, f4.5 CRF	79.50	7.95
B&J f4.5 CRF	69.50	6.95
B&J f4.5 ctd Graflex, CRF	74.50	7.45
Pacemaker Crown Graphic f4.5 Raptar, CRF	149.00	14.90
Pacemaker Speed Graphic f4.5 Ektar, CRF	182.50	18.25

3¼x4¼

Ann Speed Graphic f4.7 ctd Ektar, Sync CRF	117.50	11.70
Ann Speed Graphic, f4.5 Raptar Solenoid CRF	129.00	12.90
Pace Crown Graphic f4.7 ctd, CRF	138.50	13.85

4x5

Ann Speed Graphic, f4.7 CRF	92.95	9.30
B&J, f4.5 Tessar, CRF	99.50	9.95
Busch, f4.5 ctd Steinheil Synchro, focus spot	139.00	13.90
Ann Speed Graphic, f4.7 Ektar Sync, CRF	119.00	11.90
Pacemaker Speed Graphic, f4.7 CRF	138.00	13.80
Pacemaker Crown, f4.7 CRF	157.00	15.70

8mm CAMERAS

B & H 220, f2.5 ctd	26.50	5.00
B & H 134V, f2.5	39.00	5.00
B & H 172 R, f2.5	73.50	7.35
B & H 134 TA, f1.9 ctd	97.00	9.70
B & H 172A, f1.9 ctd	117.00	11.70
Bolex L-8, f2.8 ctd Yvar	48.00	5.00
Bolex H-8, f1.9	144.00	14.40
DeJur Citation, f2.5 ctd	37.50	5.00
DeJur Fadematic, f1.9 ctd	92.50	9.25
Kodak Brownie, f2.7 ctd	21.00	5.00
Keystone Capri, f2.8 ctd	33.50	5.00
Keystone Olympic, f2.5 ctd	45.00	5.00
Revere B63, f2.5	83.95	8.40
Revere 88, f2.5 ctd	32.00	5.00
Revere 44, f2.5 ctd mag	51.95	5.15
Revere 84, f1.9 ctd Turret	77.50	7.75
Revere 44, f1.9 ctd Turret mag	92.00	9.20

8mm MOVIE PROJECTORS

B & H Monterey, 500w, Case	49.00	5.00
B & H Revere 500w	102.50	10.25
DeJur 750w, Case	83.00	8.30
DeJur 1000w, Condomatic, Case	102.95	10.29
Keystone K-68, 750w, Case	79.00	7.90
Keystone K-95, 750w, Case	68.00	6.80
Keystone K-109, 750w, Case Spicer	86.95	8.69
Kodak Brownie, 300w, Case	38.50	3.85
Revere 85, 500w, Case	57.00	5.70
Revere 90, 750w, Case	65.95	6.59

16mm MOVIE CAMERAS

B & H Automaster Mag, Tur, f1.9	128.00	12.80
B & H 200, f2.5 ctd	105.00	10.50
B & H 200T, f1.9 ctd	156.00	15.60
B & H 70DA, f1.9 Tur	147.50	14.75
B & H 70DL, f1.9 Tur	217.00	21.70
Bolex H-16 Loader, f1.9 ctd	148.00	14.80
Cine Kodak Royal, f1.9 ctd	103.50	10.35
Keystone A-9, f2.5 ctd	49.00	5.00
Keystone A-12, f1.9 ctd	79.50	7.95
Keystone K-50, f2.5 ctd	81.00	8.10
Keystone K-55, f1.9	116.00	11.60
Pathe Super 16, f1.9 ctd	225.00	22.50
Revere 16, f1.9 ctd	86.00	8.60
Revere 26, f1.9	104.00	10.40
Victor IV, f1.9	98.00	9.80

16mm MOVIE PROJECTORS

B & H 273 A, 750w, Case	116.00	11.60
B & H 173, 1000w, Case	184.00	18.40
Keystone 482, 750w, Case	73.50	7.35
Keystone K-161, 750w, Case	84.00	8.40
Revere 48, 750w	94.00	9.40

16mm SOUND PROJECTORS

Bell & Howell Filmo Sound	189.00	18.90
Kodak F-S-10-N	179.00	17.90
R. C. A., 2 case	194.00	19.40
Victor 40	149.00	14.90

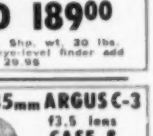
EXPOSURE METERS

DeJur Dual	15.00	5.00
GE DW 68	11.00	5.00
GE PR 1	17.00	5.00
Norwood Director	16.00	5.00
Weston Master II	14.00	5.00

SLIDE PROJECTORS

500w Ampro Auto, Case, BC	41.00	5.00
300w Argus PB300, Case BC	25.00	5.00
300w Golde Manumatic, BC	25.00	5.00
300w Golde Coronet, Case	21.00	5.00
500w Kodaslide Signet	48.00	5.00
500w LaBelle 55, BC	54.00	5.00
500w LaBelle 75, BC, Case	95.00	5.00
300w Revere 444	37.95	5.00
200w TDC Headliner, BC	28.00	5.00
300w TDC Showpak, BC, Case	32.50	5.00
300w TDC Model D, Bt	34.00	5.00
500w TDC Streamliner BC	48.00	5.00

16mm BOLEX DELUXE
3 Lens Turret Model!
8 focal length viewfinding GOMETER & f1.9 LENS
Regular $338.00
USED 189.00
Case 23.50 Shp. wt. 20 lbs.
Same with eye-level finder add 29.95



35mm ARGUS C-3
f3.5 lens
CASE & FLASHGUN
Used **31.00**
Complete outfit, Nothing else to buy! 1.00 post & ins

BRAND-NEW EXAKTA VX
f2 coated ZEISS BIOTAR Light Weight Mount
Importer's discont. model
BRAND NEW **169.50**
1.50 Post. & Ins.
Case 9.95

ROLLEICORD IV
f3.5 Xenar M-X Sync used **64.95**
1.00 P. & I.
AUTO ROLLEIFLEX f3.5 Tessar, M-X Sync, used **115.95**
AUTO ROLLEI 2.8c f2.8 Xenotar, M-X Sync, used **179.45**

LENS SPECIALS
For 8mm Movie Cameras
1½" f1.4
YELE-AMITAR
Coated, clik stops, precision focusing mount
BRAND-NEW **25.00**
Case 75c 65c Post. & Ins.
6mm f1.9 WIDE ANGLE . 24.75

400mm f5.5 MEYER TELE-MEGOR coated for Exaktas, Contax D, Astraflex 35, Astra 35, Praktica. Prec. focusing mt.
Reg. $189.50
BRAND-NEW **134.95**
1.80 Post. & Ins.
100mm f2.8 SPEED-ASTRA (Exakta) NEW 49.95
85mm f2 SPEED-ASTRA (Exakta) NEW 78.50
FREE Lens listing, write today!

If You Wish, Pay Only 10% Down.

WANT FAST SERVICE? CALL COLLECT CYPRESS 9-6400

STERLING-HOWARD

MAIL ORDER HDQRS. DEPT. SP-9
561 E. TREMONT AVE.
NEW YORK 57, N.Y.

NEW! EDIXA STEREO CAMERAS

open a new era in 3-dimensional photography!

PRESENTING **... Great, New Edixa Stereo Cameras ... destined to open a new era in 3-Dimensional photography! Plus the fabulous, new Steinheil Stereo Redufocus Wide Angle Converter ... the most outstanding photographic discovery of our time!**

Edixa Stereo Model IIIA shown with Steinheil Redufocus Wide-Angle Converter Set

EDIXA RANGEFINDER STEREO WITH BUILT-IN EXPOSURE METER ... MODEL IIIA

This is the greatest, most-advanced Stereo Camera of our age. This spectacular New Edixa Stereo Camera has a Coupled Rangefinder and built-in Photo Electric Exposure Meter ... and two matched f/3.5 Steinheil Cassar color-corrected lenses in two coupled Prontor-SVS shutters with 9 speeds ... settings of bulb, 1 second, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/300 and self-timer. Also, built-in flash synchronization and rapid-winding lever, double exposure prevention, self-cocking lever, cable and tripod sockets and other features. Beautifully finished in satin chrome and black morocco leather. Priced at only ..... **$99.50.**

NOW! INTRODUCING WIDE-ANGLE PHOTOGRAPHY FOR STEREO!

Steinheil's Scientists have just invented the New Redufocus which enables Stereo Photographers to instantly convert an Edixa Stereo to a Wide-Angle Stereo Camera! The Redufocus is attached, in a matter of seconds, to the Edixa Stereo Camera, and provides for outstanding interior shots, groups, sports, etc. The Redufocus wide-angle converter set is priced at **$99.50** with compensating viewfinder, and luxury leather case.

EDIXA RANGEFINDER STEREO ... MODEL IIA

The world's most magnificent Coupled Rangefinder Stereo Camera with Fully Automatic Features and f/3.5 Steinheil Cassar color-corrected lenses in two coupled Pronto shutters with speed settings of bulb, 1/25, 1/50, 1/100 and 1/200th of a second; also, self-timer, built-in flash, rapid-winding lever, double exposure prevention, self-cocking lever, cable and tripod sockets. Custom finished in black morocco leather and satin chrome. Priced at only ..... $79.95.

EDIXA STEREO ... MODEL IA

Glamorous as it is efficient, the Edixa Stereo IA will give you pictures of "exhibition" quality. Two matched 35-mm., f/3.5 Steinheil Cassar lenses assure you of crisp, needle-sharp color pictures every time! The rapid winding lever transports the film, cocks the shutter, moves the film counter and prevents double exposures. The Vario shutters will give you a choice range of speeds from 1/25th to 1/200th second; other features include a body shutter release, built-in flash, built-in accessory shoe for rangefinder, cable and tripod sockets. The Edixa Stereo IA is finished in satin chrome and black morocco leather, and is priced at only ..... $59.95.

See these new, exclusive Edixa Stereo cameras at your local dealer or write for colorful brochure

WIRGIN BROTHERS · EDIXA CAMERA WORKS

Wiesbaden, Germany • Since 1922

U.S.A. OFFICE: 705 BRONX RIVER ROAD, BRONXVILLE 8, N. Y.

CANADA: EDIXA CAMERA WORKS, 1191 University Street, Montreal

letters to the editor

Striped Light in Another Vein

The enclosed picture resulted from friendly bickering with some bombastic Texas camera enthusiasts who, after seeing my Mexican scenics, concluded that given the chance to travel, they also could make a good showing. I jeered and pointed out that almost any former New Yorker could make even commonplace items around the home eye-catching. Challenge accepted, competition ensued. Comparing results later, the Rebels conceded victory when I showed this print.

. . . the Rebels conceded victory

To make the lines, I contact-printed some Benday screen (a clear tissue printed with black parallel lines, for use in art layouts) on a process film, cut this negative to 2x2, mounted it, and projected it in a slide projector. Depth of field was too shallow with the diaphragm-less projection lens, so I inserted a mounted paper washer to increase over-all sharpness. The picture was taken with a Rollei on Super-XX film, 1/10 sec at f/11.

H. S. Ulan
Laredo, Tex.

More News on the Pulitzer Front

I heartily congratulate you on the Pulitzer Prize story (May), which was prophetic in that the 1955 selection was even worse than the last—just cheap sensationalism, in thoroughly bad taste.

Our camera club has voted to write a letter of protest to the people responsible. I suggest clubs all over the country do likewise, as only by widespread protest will we exert an influence toward correcting the standards by which the Pulitzer Prize in photography is awarded.

John P. Wendland, M.D.
Minneapolis, Minn.

In Texas, It's "Fromage"

I read with interest the letter in your June issue of two young gentlemen from Texas photographed while shouting the word "cheese." I'm always trying to improve my English, so I asked an English

why pictures are always better... *By Far* with Rollei

Rolleicord V

Just view through the large ground glass of Rolleicord V for a new experience in fast, *needle-sharp focusing*, and *perfect picture composition*. With your subject shown in full picture size, and in full color, you instantly and *always* get each picture, *exactly as you want it*.

Then note Rolleicord's unequalled optical system . . . its fast and sharp cutting Schneider Xenar lens, and its Synchro Compur shutter . . . a combination that insures finest picture quality. Also its many other exclusive features such as the automatic speed/stop selector, self-timer, automatic film transport, double exposure prevention and release, large and sensitive focusing knob, and many others.

Good picture opportunities won't wait, and seldom repeat themselves. Your camera must be fast, and you must be right *the first time*. Rolleicord V will give you exactly what you want, *every time*. At all leading dealers . . . only $134.55 (case extra).

Rolleiflex f:3.5
the fully automatic favorite.

Burleigh Brooks, Inc. 10 West 46th Street, New York 36, N. Y.

West, Alaska & Hawaii: **PONDER & BEST, INC.** 814 North Cole Ave., Hollywood 38, California

friend to pronounce it for me. Strangely, his mouth never assumed the shape shown in the picture of the two young gentlemen.

I thought perhaps I should ask an American to pronounce it. Same result.

Being the scientific type, I decided to experiment. I planted myself before a mirror and said—even shouted—the word in eight different languages. Finally I found it—they were saying it in French! *Fromage*, of course! When I told my American friend about it, he smiled and said, "Anything can happen in Texas."

TOMAS DUDOSO
Lima, Peru

Addenda From Abroad

I was very surprised at the completely erroneous statement in your June story *So You're Going Abroad!* on the allegedly high costs of film and equipment in England. American visitors need have no fear on that score: for example, a 120 roll of Super-XX costs about 35 cents, and a 35-mm Ilford color film of 20 exposures about $2.50—including processing and mounting. Cameras and other equipment can be bought on a special duty-free scheme we have here which drastically reduces prices for all visitors, often to as much as one third the store price for us "natives."

I hope this will set things straight, so our American friends won't be unduly dismayed at the photographic situation on this side of the "pond."

DONALD JEATER
Havant, England

No color film in England? (page 98, June issue). How about these: in 35-mm, we have Agfacolor, Ferraniacolor, Gevacolor, Ilfordcolor, and Raycolor; in 120-620 roll film we have Ferraniacolor, Gevacolor, and your Ektachrome—all the foregoing are reversal transparency materials. Ferrania and Gevaert also have reversal films available in 127 size, which is certainly not the case in America. We have two different negative films from Agfa and Gevaert, available from 35-mm to sheet-film sizes, plus Kodachrome positive in 8- and 16-mm movie reels. Ilford and Kodak both have a fine print service.

More than one of the above films are fully the equivalent of your "new" Anscochrome and Ektachrome in speed.

MERLIN ASHCRAFT
Great Yarmouth, England

We read with great interest the *Photo Guide to Foreign Countries* on page 98 of your June issue. We appreciate the fact that our firm is mentioned under Belgium, but draw your attention to the following correction in prices:

Gevacolor Negative Rollfilm (120-620): BFr 50 ($1); processing, BFr 45 ($.90)
Gevacolor Reversal Rollfilm (120-620): BFr 105 ($2.10), processing included.

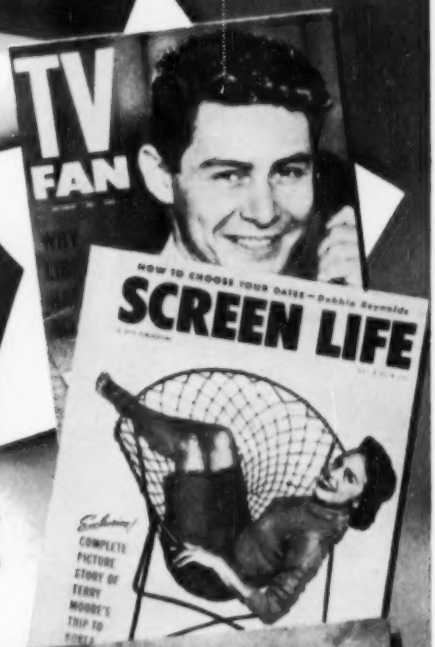
Processing for either film takes no more than four or five days, and we are sure local labs will be glad to give priority to American tourists' films.

Congratulations for the wonderful job you are doing for photography.

R. DE GROOTE
Gevaert Photo-Producten
Antwerp, Belgium

can be a

PHOTOGRAPHER



WITH

NYI Professional Training

Says

NYI Graduate G. K. (Jerry) Livitsanos, staff photographer, *Hollywood Stars, Screen Life, Screen Annual, TV Fan, TV,* and *TV Annual*

Yesterday's amateur — today's professional! This is only one out of many success stories that began with a camera and the backing and training of a great school, that paved the way to "tops" in magazine cover work. We can't promise you Rita Hayworth or Marilyn Monroe — but we can promise you the finest *Down-to-Earth* training, and you take it from there.

HOW SOON WILL YOU BE THANKING YOUR LUCKY STARS FOR NYI HOME STUDY TRAINING?

Whether you want to photograph stars of stage and screen — become a news, commercial, advertising, fashion, or portrait photographer — own your own studio or free-lance on thrilling assignments, at home or abroad — the quickest, easiest, and most sensible way to realize your ambition is through NYI's PROFESSIONAL TRAINING. To make your present abilities pay off, let us develop and TRAIN your talent the practical NYI way. Thousands of our successful students have *conclusively proved* you can do it AT HOME — without losing a moment from your present job — through NYI's world-famous training method. What's more, you can make your training pay right from the start! We show you how. Hundreds of our students earn enough in their spare time to help pay for tuition or buy new equipment. SO CAN YOU!

FREE 46th ANNIVERSARY PHOTOGRAPHY BOOK

with dozens of exciting photos by NYI graduates! Find out the 90 WAYS TO MAKE MONEY in PHOTOGRAPHY with NYI PROFESSIONAL TRAINING!

You owe it to yourself to see a copy of NYI's big, illustrated FREE book. It gives you many exciting up-to-the-minute details about today's unprecedented opportunities—why there is a secure and profitable place in this booming field for YOU. It explains how you can quickly qualify for (1) well-paid jobs, (2) a business of your own, (3) substantial spare-time earnings. Do yourself a favor: SEND FOR THIS BOOK TODAY — right now!

46th YEAR

VETERANS!
Both Resident and Home Study Courses APPROVED FOR VETERAN TRAINING

NEW YORK INSTITUTE OF PHOTOGRAPHY,
Dept. 99, 10 West 33 Street, New York 1, N. Y.
Approved Member, National Home Study Council
One of America's OLDEST and LARGEST PHOTOGRAPHY Schools
Leadership since 1910

SEND FOR FREE BOOK NOW!

NEW YORK INSTITUTE OF PHOTOGRAPHY
Dept. 99, 10 West 33 Street, New York 1, N. Y.

Please send me complete information regarding

☐ Correspondence Course ☐ Resident Training

Name .....

Address .....

City ..... Zone.... State.....

☐ Check if eligible under the G.I. Bill

Can *you* name this famous photographer?

CLUES: Recently completed a documentary on Haiti. Born on Manhattan's lower east side. Organized camera clubs for New York's P.A.L. Authored one of the most comprehensive books ever written on color photography.

WIN AN ENTECO COMBINATION CASE!

Compact carrier case of top-grained cowhide is compartmented to hold your Lens Hood, Adaptor Ring and up to eight filters.

Ten Enteco Combination Cases will be awarded* as prizes to the FIRST TEN readers who write in correctly identifying this profile. *Name the photographer—also specify what size Combination Case you require (Series V, VI or VII)!

No other filter manufactured today transmits light as accurately as Enteco. Indispensable to good color photography, essential for countless black-and-white effects, Enteco -- the one filter of precise spectral absorption -- is unsurpassed.

Processed in Enteco's own optical plant and checked six ways for specified tolerances of parallelism and flatness, Enteco Filters are by far the best you can buy. All types are available in sizes of 21.5 mm and Series IV through IX. Price range is $1.50 to $9.50.

Insist on Enteco for America's finest Filters, Polarizers, Adaptor Rings and Lens Hoods. Better pictures are **yours** — with ENTECO!

SEND FOR ENTECO'S DATA BULLETINS— THEY'RE FREE!

Enteco

ENTECO INDUSTRIES, INC.
610 Kosciusko St., Brooklyn 21, N. Y.

tools and techniques

by Norman C. Lipton

A round-up of recent developments and significant trends

Photographic Technology Training. For the first time in the history of the American photographic industry, a step has been taken to replenish the rapidly dwindling number of qualified "outside" repair facilities available to owners and users of photographic equipment. This important first step is the establishment by the State University of New York of a two-year course in Photographic Equipment Technology at the Long Island Agricultural and Technical Institute, Farmingdale, N. Y., during the upcoming fall term. Established at the urging and with the co-operation of the National Association of Photographic Manufacturers, Inc., the course is designed to equip students to earn a good living in the repair, maintenance, and installation of photographic equipment. The curriculum includes basic technical, mechanical, and service courses along with general-education subjects. Maximum registration during the first term will be limited to 30 persons. There will be no tuition charges for residents of New York State; nonresidents will pay a moderate fee. To qualify, applicants must be at least 16 years old and graduates of an approved 4-year high-school course or equivalent; they must pass a series of entrance examinations, specifications for which are available from the Office of Admissions of the Institute. A collegiate-level degree, Associate in Applied Science, will be awarded to those completing the prescribed course of study. According to the NAPM Committee on Training, whose sustained efforts led to the approval of the technology course, the shortage of qualified repair personnel is the result of the tremendous post-World War II growth of the photographic industry as well as the increasing complexity of products introduced in this period. Continuing technological advances are bound to make the need for qualified graduates of this type of course even more urgent in the years to come.

Ilford's Microphen Formula? An apparent disclosure of the formula for Ilford's new proprietary developer, Microphen, is incorporated in the technical paper *The Replenishment of Phenidone-Hydroquinone Developers* by A. J. Axford and J. D. Kendall, Renwick Laboratory, Ilford, Ltd., published in the March 25, 1955 *British Journal of Photography* as well as in Vol. 6 No. 1 (1955) of *Photographic Engineering*. The unique properties and performance characteristics of Microphen developer were described in Bob Schwalberg's trail-blazing article in the July, 1955 issue of POPULAR PHOTOGRAPHY, *Microphen — A new high-energy fine-grain developer — the best yet.* Schwalberg's exhaustive tests, described in detail in the article, confirmed Ilford's claim that Microphen was twice as fast as Ilford I.D.11 (which is identical to unbuffered Kodak D-76 developer) and also showed that it was more effective than any other available developer for forced development of last-ditch exposures with minimal highlight blocking.

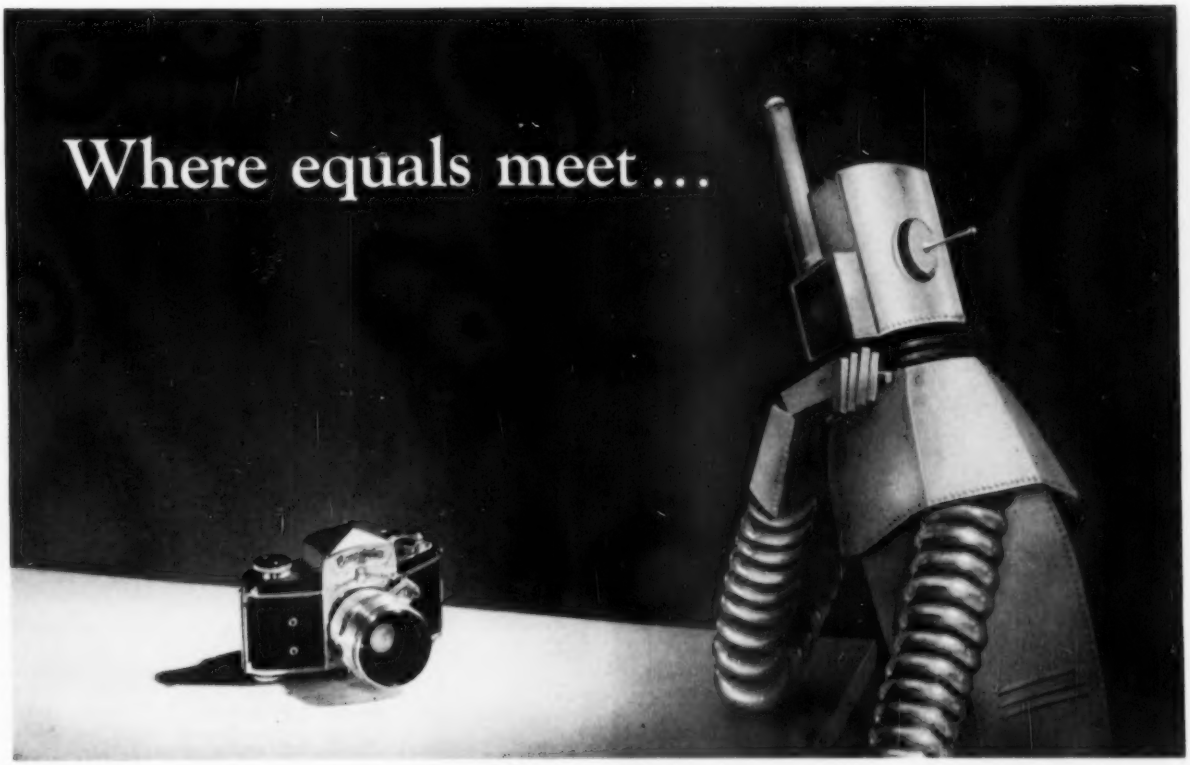
The Axford-Kendall paper described two methods for replenishing a typical buffered PQ (Phenidone-hydroquinone) negative developer. The particular fine-grain developer formula cited was said to give with Ilford HP3 panchromatic film "twice the photographic speed that is obtained with I.D.11, with similar graininess and more constant performance." It consists of:

Sodium sulfite (anhydrous)	100.0 g
Hydroquinone	5.0 g
Borax	3.0 g
Boric acid	3.5 g
Potassium bromide	1.0 g
Phenidone	0.2 g
Water to make	1.0 liter

The authors pointed out the fact that PQ developers were not as sensitive to bromide and to changes in bromide concentration during development as buffered MQ developers. Hence, the relatively high potassium-bromide content of the formula is not out of place.

In addition to the developer formula, two replenishing formulas were given—one for "topping up" (replacement of developer lost by carry-over) and the other for "bleed" replenishment (continuous running off of used developer and replacement by an equal amount of replenisher). Both systems are intended to maintain development characteristics at a fairly constant level. Still another formula was given for converting the discarded but only partially exhausted developer from the "bleed" system into a tray-strength developer for film or bromide enlarging paper (though not for chloride contact printing papers).

How A Rattlesnake Strikes. Early in June, we witnessed with other representatives of the photographic press, a demonstration by Henry M. Lester of the technique he used to photograph the lightning-fast strike of a rattlesnake at 2,400 fps on 16-mm Kodachrome. The event took place in the upstairs Reptile House laboratory of New York's famous Zoological Park (the Bronx Zoo) with the co-operation of Dr. James A. Oliver, Curator of Reptiles, and other members of the Park's professional staff. In many ways, the equipment and techniques employed were reminiscent of Lester's famed high-speed ciné study in 1947 of the wing beat and vibrating balancer action of the common drone fly which led to the recent perfection of a revolutionary vibratory gyroscope by the Sperry Gyroscope Company (T&T, February 1954). However, the rattlesnake motion-analysis study involved a triggering problem related to the personality and psychological motivations of the subject. It took 6 months to (1)



The Automatic Age is no longer categorized among "things to come". It is here! In many fields, Mechanical Men are performing wonderful things. In the field of photography too, there is an Automaton . . . the Automatic Exakta VX.

The Automatic Exakta VX with Penta Prism eye-level viewfinder and Split-image Rangefinder and 58-mm, f/2.0 Automatic Zeiss Biotar Lens is priced at $392. Also available with waist-level finder. The Automatic Exa has most of the advantages of 35-mm, automatic, single-lens, reflex photography in a camera foolproof enough for a child to use. The Automatic Exa is equipped with the 50-mm, f/2.8 Automatic Isco Westanar, and is priced at $129.50. Automatic Exa with Isco Westanar f/2.8, 50-mm lens and Penta Prism, $159.50. Automatic Isco Westanar lens alone, $69.50.

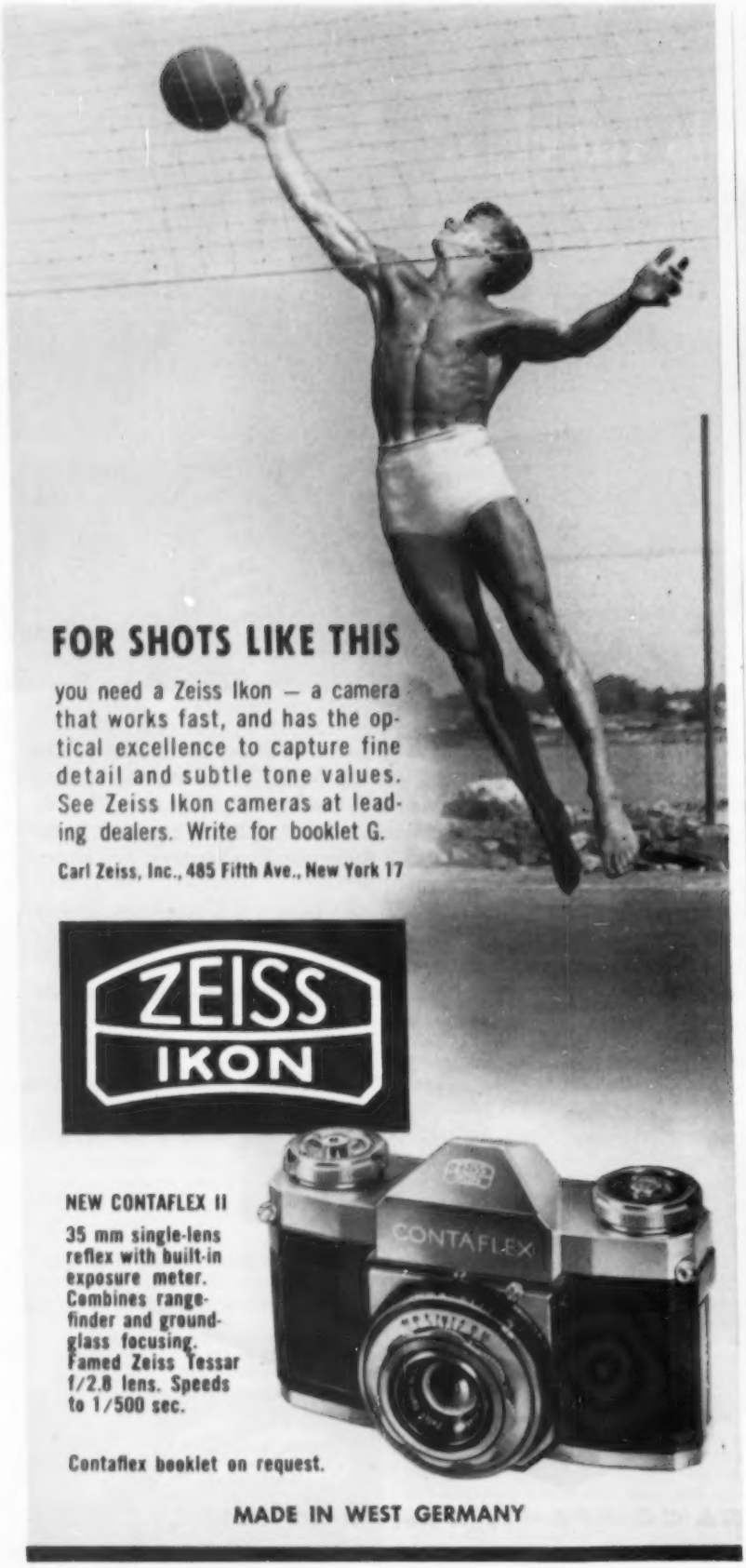
Put an Automatic Exakta VX or Automatic Exa to the test, and you will see the Automatic Age of photography in motion . . . Today!

Your dealer will gladly demonstrate these outstanding cameras to you.

EXAKTA CAMERA COMPANY, 705 Bronx River Road, Bronxville 8, N. Y.

Exclusive Factory Appointed Representatives in the U.S.A. for Sales & Service of Exakta and Exa Cameras

Introducing!



sonality and psychological motivations of the subject. It took 6 months to (1) select a ferocious snake ("Herman," a hot Western Diamondback Rattlesnake) who could be goaded into striking at a target in the picture area; (2) work out a goading technique that would produce a fairly predictable response, and (3)

Rattlesnake strikes at moving target as two banks of No. 31 focal plane flashbulbs trained on subject rotate through Lester-light reflectors, emitting intense illumination during entire 1½-sec, 2,400 fps run of camera.

couple the snake's response to an electronic circuit that would trigger Lester's unique high-intensity light source (illustration). The Kodak High-Speed ciné camera has to be actuated manually 1 second before the strike, which adds still another complication to the timing problem.

Before the actual demonstration, we witnessed a screening of a successful strike which had been photographed with much sweat and tears on April 7 of this year. Unfortunately, none of the three photographic attempts we saw led to a second clean strike that could be incorporated in the N. Y. Zoological Society's teaching film on the "defenses of reptiles" which was the reason for the project. We did, however, get an insight into Herman's mercurial temperament, for between the second and third attempts, the rattler calmly slithered off his starting platform, descended to the floor and quickly began making his way toward the assemblage of writers and editors watching the proceedings. A couple of

Photographic press representatives watch high-speed photography of rattlesnake strike at Bronx zoo Reptile House lab, on June 6.

deft restraining strokes from Dr. Oliver's training hook brought Herman to heel, and the demonstration continued.

Incidentally, Lester's continuous Flash

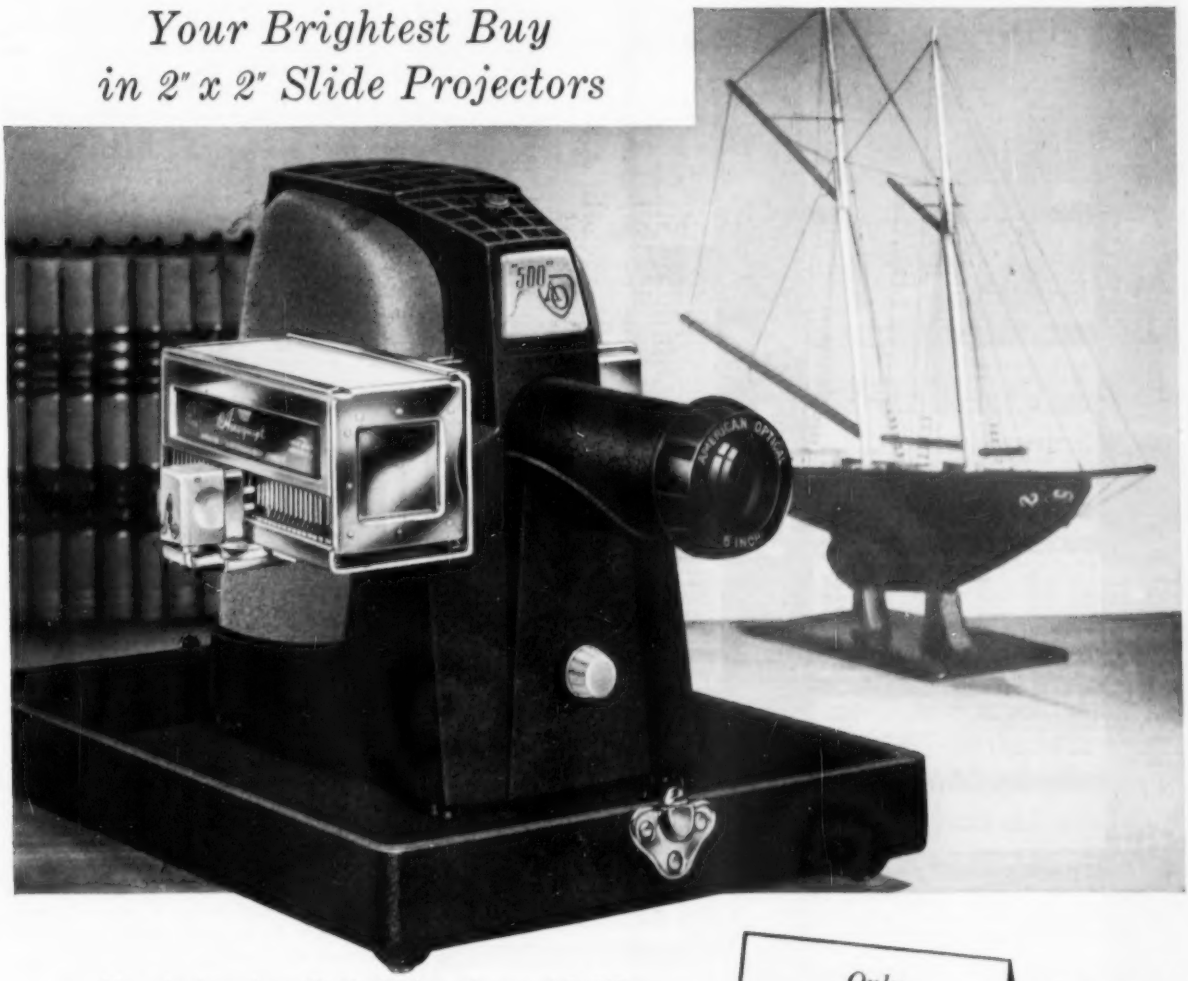
WORLD-WIDE IMPORTERS of Everything
Automatic Focusing ENLARGERS
2¼x2¼ AMATOMAT only $69.00
Precision engineered automatic enlarger combined with counterbalanced Parallelogram Support, assures

Lighting setup provides a very adequate 2,400 fps exposure on Type A Kodachrome at f/4.5. The light-triggering de-

Introducing!

THE NEW AO 500

Your Brightest Buy in 2" x 2" Slide Projectors



Here is American Optical's brand new AO 500 — smartly styled and finished in an attractive two-tone "charcoal" and "starlite" gray. This powerful 500 watt projector reproduces your slides with the greatest clarity and sharpness — no other projector gives more even screen illumination and brilliant color reproduction. Like all American Optical projectors, the new AO 500 has built-in quality, unmatched by any comparable make.

Only
$74.50
Complete with Airequipt Changer And Lift-Off Carrying Case

Other AO 500 Models As Low As $57.50

Check these outstanding features . . .

- **Powerful 500 watt lamp**
- **Exclusive, all-coated AO lens system**
- **Pressurized cooling for maximum slide protection**
- **All-metal construction**
- **Patented AO heat filter**
- **Handsome lift-off carrying case, leatherette cover, all-wood construction**

American Optical
CHELSEA, MASSACHUSETTS

T. M. REG. BY AMERICAN OPTICAL COMPANY

WORLD-WIDE IMPORTERS
of Everything Photographic!

New German STROBE UNITS

Famous Ultrablitz, the World's Finest Electronic Flash! Model Ia, very lightweight, uses 4 simple flashlight batteries, or AC. Has Color guide-number of 25. Only $20.95
Famous Ultrablitz Model IIm is a real powerhouse! Uses standard flashlight batteries, or AC. Lifetime tube (over 25,000 flashes) permits Color guide-number of 50. Weighs more 4 lbs. Looks like smart portable radio! Only $44.00

Newest German Metz Strobe Flash! Amazingly light unit uses 2 batteries (priced at $6.95) good for more than 3,500 flashes, and weighs 2 lbs. Color-guide number 40-50. Price without batteries ..... Only $29.00

PRAKTICA FX

The fabulous new Praktica FX 35mm Reflex Camera. Look at all these features: Built-in Synchronization for Flash and Strobe ... 3 flash contact points on camera face ... combined Reflex Finder and Eye Level Sportsfinder, with magnifier ... Focal Plane Shutter Speeds 1/2 to 1/500 ... Interchangeable Lens feature ... Automatic Shutter Cocking and Automatic Film Transport ... Factory Registration

with Victor f2.9 ..... $49.95
with Will Wetzler f2.8 ..... 63.95
with Carl Zeiss Tessar Pre-Set f2.8 ..... 78.50
with Carl Zeiss 50mm Biotar f2 ..... 99.50
with Carl Zeiss 58mm Biotar Pre-Set 99.50

SOLIGOR 35mm

One of our fastest sellers because this Single Lens Reflex compares feature for feature with famous name, much more expensive cameras. You get All Metal Construction ... Built-in flash synchronization ... Built-in prism rangefinder with ground glass focusing ... Built-in eye-level sportsfinder ... interchangeable bayonet lens mount ... and a fine, coated 50mm f3.5 lens. A great camera, a terrific value $24.95

ARGUS C-3 ACCESSORIES

Argus C-3 Reflex Housing
with EXTENSION BELLOWS, converts your Argus to a Single Lens Reflex System. Parallax-free viewing for Telephoto, Close-up and Macrophotography. Incorporated focusing eye-piece, accepts all lenses and accessories $30.00

Telephoto and Wide Angle Attachment for Argus C-3 ..... each $14.00
100mm f4.5 Sandmar Telephoto $35.95
Viewfinder 2.00
135mm f3.5 Telephoto Lens 39.95
Adapter Ring, and Three Filters for Argus C-3 ..... 6.95
35mm f4.5 Wide Angle Sandmar 39.95
Stereo Attachment for Argus C-3 ..... 12.95

Kodak RETINA IIC and IIIC

Retina IIC, f2.8 ..... $ 99.95
Retina IIIC, f2 ..... 138.75
Retina Longer 61.75
Retina Courtar 47.75
Retina Universal Finder 6.95
Telephoto Attachment for All Retina Cameras 14.85
Wide Angle Attachment for All Retina Cameras 14.85
We have a great number of accessories for the Retina Cameras. Prices upon request.

CONTAX IIA, CONTAX IIIA

Contax IIA 50mm f2 Sonnar $250.50
Contax IIA 50mm f1.5 Sonnar 279.50
Contax IIIA 50mm f2 Sonnar 287.00
Contax IIIA 50mm f1.5 Sonnar 307.00

NIKON

Nikon S-2 with 50mm f2 Lens $225.00
Nikon S-2 with 50mm f1.4 Lens 260.00

Lenses & Accessories for LEICA, CANON, SIMILAR CAMERAS

Coupled High Precision Lenses, Coated. Manufactured in Germany, France, and Japan. We are not permitted to advertise their famous names.

28mm — f3.5	$92.50	90mm — f4	29.95
35mm — f2.5	74.95	90mm — f2.5	59.40
35mm — f3.5	64.50	90mm — f1.8	116.40
35mm — f4.5	36.65	135mm — f2.5	133.40
50mm — f1.1	380.00	135mm — f4.5	38.65
85mm — f2.8	63.40	135mm — f3.5	59.50

Reflex Housing with Bellows—Converts your camera into a single lens reflex system. Parallax-free viewing for Telephoto, Close-up and Macro Photography—incorporates focusing eye piece, and bellowscope. Accepts all lenses, and accessories $35.95
Extension Bellows for Leica 12.95
Set of Extension Tubes 4.95
Metal Snake Chain with Locks 2.75
Metal Snake Chain without Locks 1.75
Stereo Attachment 12.65
Cico Tripod 14.65
Leica to C Mount Adapter 4.95

Adapter Rings, Lens Shades, Filters for all lenses available.

Automatic Focusing ENLARGERS

2¼x2¼ AMATOMAT only $69.00
Precision engineered automatic enlarger combined with counterbalanced Parallelogram Support, assures vibration-free fingertip lift control with automatically needle-sharp image up to 10X magnification. Wing nut allows easy swinging for larger magnification. This quality enlarger, manufactured by the largest manufacturer in Germany, is offered for the first time for $69.95. Includes auto-masking negative carrier, double condensers, and world-famous Steinheil Cassar enlarging lens f3.5 with click-stops and red filter. Same automatic enlarger for 35mm $59.00

35MM AMATO ENLARGER
A precision engineered unit. Has negative carrier, condensors and precision f4.5 lens $23.95
Same as above only 2¼x2¼, $39.50

LENSES for EXAKTA, EXA, CONTAX S, CONTAX D, PENTACON, HEXACON, PRAKTICA, PRAKTIFLEX

All Lenses Latest Models, Coated. We are not permitted to advertise their famous names. Manufactured in Germany, Italy, France, and Japan. Complete information is available upon request. When ordering, please specify with which camera the lenses will be used.

28mm — f3.5	$93.50	135mm — f3.8	25.95
35mm — f2.5	76.00	135mm f3.5 Pre-Set	52.50
35mm — f4.5	37.50	135mm — f3.8 Pre-Set	38.95
40mm — f4.5	36.00	135mm — f3.5	44.50
50mm — f2.8	19.95	135mm — f4.5	29.95
50mm — f2.8	17.00	180mm — f2.8	234.00
85mm — f2.8 Automatic Pre-Set	96.50	180mm f5.5 Pre-Set	98.00
90mm — f4	24.95	250mm f5.5 Pre-Set	87.00
90mm — f4 Pre-Set	24.95	250mm — f5.5	75.50
90mm — f4.5	19.95	300mm — f4	389.50
100mm f2.8 Pre-Set	$49.00	400mm — f5.5	128.50
105mm — f4.5	$ 15.95		

ACCESSORIES for EXAKTA CAMERAS

Roof Prism with Rangefinder $31.65
Roof Prism without Rangefinder 18.00
Rangefinder for Roof Prism 12.95
Ground Glass without Rangefinder for Roof Prism 4.95
Leather Case for Roof Prism 2.95
Metal Snake Chain with Locks 2.75
Metal Snake Chain without Locks 1.75
Stereo Attachment 12.65
CiCo Tripod 14.65
Flashgun for Exakta 2.00
Kobold BC Folding Flashgun 12.65
Famous Folding Japanese Flashgun 9.95
Extension Bellows 12.95
Extension Bellows with 50mm f2.8 lens 24.75
Set of Extension Tubes 7.65
Microscope Adapter 9.95
Use your Exakta Lenses on your 16mm or 8mm Camera with the help of an Exakta to C Adapter 12.95

ACCESSORIES for CONTAX S, CONTAX D, PENTACON, HEXACON, PRAKTICA, and PRAKTIFLEX CAMERAS

Metal Snake Chain without Locks ..... $ 1.75
Metal Snake Chain with Locks 2.75
Stereo Attachment 12.65
Cico Tripod 14.65
Flashgun 3.00
Famous Folding Japanese Flashgun 9.95
Kobold BC Folding Flashgun 12.65
Set of Extension Tubes 4.95
Extension Bellows 12.95
Extension Bellows with 50mm f2.8 lens 24.75
Penta Prism for Praktica 12.95

UNIVERSAL ZOOM FINDER
LEICA CONTAX NIKON CANON

$14.65
Latest parallax-corrected model, clicks into position to show any focus length from 35mm to 135mm! Actually magnifies image the way lens does. Luxurious lined leather case $1.00

ROBOT ROYAL

This latest model has a coupled rangefinder for the first time, and a new release that takes 6-6 frames per second. Uses standard 35mm film, and gives 55 pictures on a regular 36-exposure roll, size 1cl. Nine shutter speeds—1/2 to 1/500. Bayonet lens mount, with 4 Schneider Lenses available, also all accessories available. This great rapid sequence camera, List $295.00 ..... NOW $189.50

CONTAFLEX

Contaflex I Single Reflex Camera—Rangefinder f2.8 Tessar, fully synchronized $120.00
Contaflex II Latest German Zeiss Precision Product—with Photo Electric Built-in Exposure Meter, and Tessar f2.8 lens 149.00

VOIGTLANDER CAMERAS

Vito B f3.5 Scopar $44.00 — Vitessa f2 Ultron $120.00
Vito II f3.5 Scopar 40.00 — Prominent f3.5 Scopar 117.50
Vitessa f3.5 Scopar 75.00 — Prominent f2 Ultron 169.00

CONTINA

Contina IA f3.5 Novo $40.00
Contina IIA f3.5 Novo Exposure Meter 56.00
Contina IIA Novitar f2.8 ..... 64.00

EXPOSURE METER

Sixtomat ..... $21.15 — Omni, Automatic $19.95

Everything Listed is BRAND NEW unless otherwise stated, fully guaranteed, both mechanically and optically. We sell all merchandise on a 20 day, full money back guarantee. 20% deposit is required on all C.O.D. shipments. Servicemen and Foreign orders welcome.

CAMERA IMPORT CORPORATION
521 FIFTH AVENUE • NEW YORK 17, N. Y. Dept. P-95

Lighting setup provides a very adequate 2,400 fps exposure on Type A Kodachrome at f/4.5. The light-triggering device is an extremely sensitive capacitance relay in the form of a screen wire on the work table which actuates the current when the snake's head protrudes two inches into the wire field on its way to the target.

Weather-Proof Shutters? Newspaper and press-association photographers have been resorting to "kitchen mechanics" to overcome the tendency of synchro-shutters to short-circuit their electronic flash outfits when they are obliged to shoot in the rain or under conditions of high relative humidity. Illustrated below is a typical rig worked out by Murray Becker, chief photographer of Associated Press, New York City. It consists of a plastic refrigerator bag with the elastic of its open end tightly draped over the lens board of the Speed Graphic camera and an opening the exact size of the front lens element cut out of the opposite end. The cut end of the bag is held securely between the lens shade and the lens mount to form a moisture-proof seal. Both shutter-speed and diaphragm adjustments as well as shutter cocking are accomplished by setting the levers through the soft, semi-transparent bag. Before working out this simple solution,

Plastic refrigerator bag is used to seal press camera synchro-shutter against humid atmosphere to prevent short-circuiting of electronic flash units in wet-weather service.

Becker and his co-workers found that the failure of speedlight units to fire in a wet atmosphere was entirely attributable to the shutter (whose contacts, incidentally, continue to function perfectly with expendable photoflash lamps) and, that all imported and domestic shutters suffered from the same defect under identical conditions. The use of rubber gaskets over the shutter contacts and application of waterproof silicone grease to the internal as well as the external parts of the shutter failed to solve the problem. There is an apparent solution to the difficulty in the electronic-flash synchro-shutters now being made for underwater photography. However, cost factors and the relatively small business volume represented by the nation's press photographers (who have

invites you to try any fine photographic equipment for

FACTS
ABOUT NEW FILM

show you why
now is the time to buy
the 60-second

POLAROID®
Land
CAMERA

You've heard a lot about the remarkable camera that develops and prints its own pictures. Maybe you've even used it—and known the thrill of holding the print in your hand one minute after you've snapped the shutter. Now, with a new high-speed film just announced, the Polaroid Land Camera not only gives you finished pictures in 60 seconds—but pictures as fine as any you've ever taken! Here are the facts: **1. The new film gives you unusually sharp, clear prints.** Details you might scarcely notice with your naked eye—blades of grass, a fluffy cloud—seem to spring to life on the finished print. Even if one side of your subject is in brilliant sunlight and the other in shadow, you'll get good detail in both light and dark areas. With the new Polaroid PolaPan Land Film, the camera captures perfectly the subtlest variations of tone and texture. **2. Skin tones look softer, more flattering** with this new panchromatic film. It subdues freckles and blemishes. Lipstick never comes out black. You get prints with greater depth, more warmth and richness. There's no finer film for taking really beautiful photographs of babies and women. **3. You can take many indoor shots without flash** with new Polaroid PolaPan. You can shoot in only one-fourth the light you used to need. This new film is so much faster* you can take many pictures indoors with natural daylight . . . shoot excellent pictures on the grayest day, even in the rain . . . get superb portraits with a single 150 watt bulb in an ordinary bridge lamp (see below). **4. Your precious prints will last.** Baby pictures, priceless vacation shots, family portraits are yours for a lifetime; they'll last just like any fine prints. **5. The new film's wider latitude corrects your exposure errors.** You can make quick judgments safely because this film gives you much more leeway in exposure. **6. Copies and enlargements are better than ever,** because of the magnificent detail you get in the original print. **7. You see your results right on the spot.** You set one dial—which automatically selects the right shutter speed and lens combination—and you're ready to shoot. 60 seconds later you've got a finished picture. (You'll economize with the Polaroid Land Camera too, because you don't *have* to shoot up a whole roll just to get at one or two pictures you really want to see.) **8. There are models to fit any budget.** You can now buy a Polaroid Land Camera for as little as $1.19 a week. This new low price means now *you* can enjoy the exciting, creative kind of picture-taking that only this camera, only this new film can give you. The facts make it clear. This is the time for *you* to buy a Polaroid Land Camera.

*EXPOSURE INDEX 400 – ASA EQUIVALENT

These pictures were taken with a Polaroid Land Camera · POLAROID CORPORATION, CAMBRIDGE, MASS.

(Advertisement)

only D.F.A. offers unique

Dowling's FIFTH AVENUE

invites you to try any fine photographic equipment for 30 DAYS FREE TRIAL!

Headquarters for . . .

omega ENLARGERS . . . the World's Finest!

Much of the fun in photography is in making your own enlargements. And you'll get more enjoyment from your darkroom activities with the finest instrument made for this purpose: Omega! Omega enlargers are available in a choice of models, designed to satisfy the most exacting requirements of every hobbyist and professional.

for negatives 35mm to 2¼" X 3¼"

Omega B-8	$109.50 Cash or $10.95 Down
Automega B-7	134.50 Cash or 13.45 Down

for negatives 35mm to 4" X 5"

Omega D-2 with Omegalite	164.40 Cash or 16.44 Down
Omega D-2 with Condensers	173.50 Cash or 17.35 Down
Omega D-2 with Colorhead	183.50 Cash or 18.35 Down
Automega D-3 w. Omegalite	197.50 Cash or 19.75 Down
Automega D-3 w. Conden's.	207.50 Cash or 20.75 Down
Automega D-3 w. Colorhead	217.50 Cash or 21.75 Down

for negatives 2¼" X 2¼" to 5" X 7"

Automega E-5 w. Conden's.	286.55 Cash or 28.65 Down
Automega E-5 w. Colorhead	301.55 Cash or 30.15 Down
Automega E-5 w. Omegalite	304.75 Cash or 30.47 Down

***Just out!* For negatives 8mm (Minox) to 35mm**

Omega A-2 Portable	87.50 Cash or 8.75 Down
Omega A-2 Professional	92.50 Cash or 9.25 Down

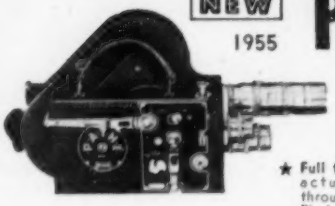
Extraordinary NEW Omega 120 Camera

• Supersensitive, pin-point accurate rangefinder • Retractable pressure plate for unvarying film flatness • New steady-grip design and oversized controls for touch-system operation • Automatic parallax compensating viewfinder • Automatic resetting action • 9 crisp 2¼" X 2¼" negatives on economical 120 roll film. With Omicron coated f/3.5 lens in Rapax X synch shutter **$239.50 Cash or $23.95 Down**; or with Omicron coated f/3.5 lens in Rapax full synch' shutter **$258.50 Cash or $25.85 Down.**

Selected Omega 120 Camera Accessories

6-shot Omegaflash	$49.50
Leather Compartment Case	32.50
Aluminium Carry-all Case	69.50

NEW 1955 PATHÉ "16"



★ **Full frame follow-focus.** You actually sight directly through the lens in use while filming. No parallax! No out-of-focus!

★ Built-in variable shutter
★ Speeds to 80 frames per second
★ 30 feet run on single wind
★ Optical viewfinder for various focal length lenses
★ Built-in hand crank
★ Tri-lens turret for standard "C" mount lenses
★ Automatic footage and frame counters
★ Single frame device
★ All this—and only 5 lbs. in weight

$450. Cash or $45. DOWN

(lenses additional)

Write DOWLING'S Fifth Avenue **today** for **free** brochure and lens price lists! Your present equipment may be used as down payment. Order your new PATHE "16" now. You'll find it ready to meet any movie-making challenge!

Dowling's Fifth Avenue

30 Days FREE Trial

If for any reason you are not entirely satisfied with any purchase made from DOWLING'S Fifth Avenue, you may return the equipment. We will promptly refund all you paid, including any return transportation charges paid by you. Or, if YOU prefer, we will exchange the equipment for something which does satisfy you.

AURICON *Cine-Voice*

YOU can produce 16mm talking pictures the Hollywood way! While "shooting" the Cine-Voice camera simultaneously photographs a sound track along one film edge. The film cost, black and white or Kodachrome, is identical to silent types. Magnetic striping is **not** required, saving you both time and expense. Best of all the processed film plays **perfectly lip-synchronized** on any 16mm sound projector! Compact and easy, to operate — either from house current or portable power pack — your Cine-Voice outfit is furnished **complete** as illustrated. Standard "C" mount lenses only are optional.

Write D. F. A. for FREE brochure!

Whether for home enjoyment or professional use, the Cine-Voice opens a new world of sound pictures . . . write for **free** Auricon brochure or order from DOWLING'S Fifth Avenue **today!**

Cine-Voice, Single Lens Model, **$695. Cash or $69.50 Down;**
Cine-Voice, 3 Lens Turret Model, **$784.50 Cash or $78.45 Down;**

Auricon Super-1200, 1200' capacity, **$4652.15 Cash or $465.21 Down.**

Just out! All-new Auricon Pro, 600' capacity model **$1165. Cash or $116.50 Down.**

Schools, Churches and Industrial Users . . .

Please write Industrial Division, DOWLING'S Fifth Avenue for quotations and assistance with your individual problems . . . in sound movie-making or any phase of photography!

Add THAT DISTANT DETAIL . . . THAT EXCITING CLOSE-UP . . . TO YOUR **HOME MOVIES**

with Elgeet

TELEPHOTO MOVIE LENSES

Far-off vistas, fast sports action, candid close-ups are all captured clearly and brilliantly with hard-coated, color-corrected Elgeet telephoto lenses. And there is an Elgeet lens designed for **your** camera, priced for **your** movie budget.

CUSTOM TELEPHOTO LENSES — 16mm

75mm (3") f/1.9, Focusing	$73.45 Cash or $7.34 Down
102mm (4") f/2.7, Focusing	88.95 Cash or 8.89 Down

CUSTOM TELEPHOTO LENSES — 8mm

38mm (1½") f/1.9, Focusing	49.00 Cash or 4.90 Down
38mm (1½") f/1.5, Focusing	68.35 Cash or 6.83 Down
38mm (1½") f/3.5, Fixed Focus	25.75 Cash or 2.57 Down

CINEMATAR TELEPHOTO LENSES — 8mm

38mm (1½") f/3.5, Fixed Focus	17.95 Cash or 1.79 Down
Telephoto attachment for Kodak Brownie, Bell & Howell 220 or 252	19.90 Cash or 1.99 Down

Write D. F. A. for complete FREE brochure of Elgeet 8mm and 16mm lenses for every movie making purpose! Special list of superb Elgeet "C" mount lenses suitable for Cine-Voice also free on request.

Dowling's 175 Fifth Avenue, New York 10, N.Y.

only D.F.A. offers unique LIFETIME GUARANTEE

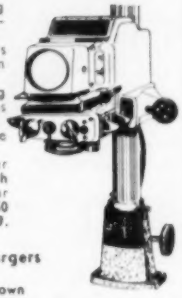
Dowling's

175 Fifth Avenue
NEW YORK 10, N. Y.

At last . . . now available from D. F. A.!
World-famous 1955

Durst Enlargers

DURST 35mm MICROMAT COLOR ENLARGER



- Automatic focusing for miniature and sub-miniature sizes; also used for micro-copying
- Distortion control—horizontal and vertical—with built-in adjustment lever
- Filter slot for standard color correction filters
- Illuminated scale indicates magnification factors
- Baseboard has power switch, cord and plug
- Patented luminous diaphragm ring makes lens stops visible in darkroom
- Plus many, many other important, exclusive features

COMPLETE MICROMAT unit with Schneider Componon coated 50mm f/4.0 lens **$285. Cash or $28.50 Down**; or with Schneider Componar coated 50mm f/3.5 lens **$265. Cash or $26.50 Down.** Optional: Micro Copy Attachment **$139. Cash or $13.90 Down.**

Other Superb new 1955 DURST Enlargers

Reporter Portable "35" **$ 59.50 Cash or $5.95 Down**
D609 2½ x 3½ Enlarger **119.50 Cash or 11.95 Down**
Unomat Color Enlarger (to 2¼ x 3¼, with lens) **249.50 Cash or 24.95 Down**
Duomat Color Enlarger (to 2¼ x 3½, with lens) **375.00 Cash or 37.50 Down**
Laborator 35 (5 x 7) Enlarger and Copy Camera **695.00 Cash or 69.50 Down**

Write DOWLING'S Fifth Avenue **today** for **free** brochure on extraordinary new DURST products. D. F. A. ships all DURST equipment with express and insurance prepaid!

IT'S ECONOMY TO START WITH THE FINEST!

Good movie equipment is a lifetime investment. Because of D. F. A.'s Easy Payment Plan, **you** can afford to own the best **now!** Wherever you may live, you'll find it pleasant to shop by mail from DOWLING'S Fifth Avenue. Quick, confidential credit arrangements plus fast, personalized service actually may bring us "closer" to you than your local store. Whether you live in Florida, Nebraska or California — or are a G. I. overseas — you'll find that D. F. A. delivers it quickly and, above all, delivers it "right!"

Bolex C-8 with Lytar coated f/2.5 lens ..... **$89.95 Cash or $8.95 Down**
Bolex C-8 with Lytar coated f/1.9 lens ..... **129.95 Cash or 12.95 Down**
Bolex B-8 with Yvar coated f/2.8 lens ..... **119.50 Cash or 11.95 Down**
Bolex B-8 with Lytar coated f/1.9 lens ..... **149.50 Cash or 14.95 Down**
Bolex B-8 with Switar coated f/1.5 lens and Yvar 1½" (telephoto) coated f/2.8 lens ..... **274.50 Cash or 27.45 Down**
Bolex H-8 Leader with Lytar coated f/1.9 lens ..... **259.50 Cash or 25.95 Down**
Bolex H-8 De Luxe with Switar coated f/1.5 lens ..... **438.25 Cash or 43.82 Down**
Bolex H-16 Leader with Lytar coated f/1.9 lens ..... **269.50 Cash or 26.95 Down**
Bolex H-16 Supreme w/Lytar coated f/1.9 lens ..... **394.00 Cash or 34.90 Down**
Bolex H-16 Supreme w/Switar coated f/1.4 lens ..... **510.00 Cash or 51.00 Down**
Bolex H-16 Supreme with Switar coated f/1.4 lens, Switar 16mm coated f/1.8 lens, Switar 50mm coated f/1.4 lens & deluxe H-1 case complete ..... **779.00 Cash or 77.90 Down**
Pan Cinor Zoom coated f/2.8 lens (for 8mm) ..... **219.50 Cash or 21.95 Down**
Pan Cinor Zoom coated f/2.8 lens (for 16mm) ..... **349.50 Cash or 34.95 Down**
Bolex Stereo System **complete** ..... **387.00 Cash or 38.70 Down**
Bolex Electric Camera Drive ..... **89.50 Cash or 8.95 Down**
Bolex Tripod ..... **69.50 Cash or 6.95 Down**
Bolex Titler and Special Effects Kit ..... **299.50 Cash or 29.95 Down**
Bolex M-8 Projector with case ..... **169.50 Cash or 16.95 Down**
Bolex Combination G8mm-16mm Projector ..... **339.50 Cash or 33.95 Down**

Just out!—2 superb new Pan Cinor DIRECT THROUGH-THE-LENS VIEWING zoom lenses for 16mm cameras. . .
Pan Cinor-70 (17.5 to 70mm) **449.50 Cash or 44.95 Down**
Pan Cinor-100 (25 to 100mm) **750.00 Cash or 75.00 Down**

America's Largest and Most Distinguished Mail Order Camera Specialists
• Integrity • Reliability

It's Sensational!

NEW FME

Two-Speed, High-Fidelity TAPE RECORDER

- **Dual speed: 3¾" and 7½" per second**
- **High-fidelity that will delight the most discriminating user**
- **Two-hour playing time**
- **Single knob control for quick, easy operation**
- **Neon record level indicator**
- **Radio-phono-TV input jack**
- **External speaker jack for large audiences, or for ear-phones**
- **Compact, light, attractively styled and sturdy two-toned case**
- **Plus a host of other features usually found only in machines selling for twice the price**
- **Foot pedal stop switch available as accessory**

only $139.95 Cash or

Only $13.95 DOWN

The new **Nikon** S2

Just Released

with all the features you want in a 35mm camera!

- Life-size, combined range-viewfinder
- Luminous composing frame in finder
- Rapid, **single** stroke film transport
- Hi-speed film rewind
- 12 shutter speeds from 1 sec. to 1/1000th sec., plus time and bulb
- Positive synchro selector for all flash bulbs, all shutter speeds; also for electronic flash
- Removable back and fixed take-up spool for easy loading
- Tripod socket built into camera body — avoiding undue strain on base
- Standard PC flash terminal with clip lock
- ¼-turn bayonet lens mount for instant lens interchangeability
- Finger-tip controls all conveniently located on top of camera

NIKON S-2 with famous Nikkor coated f/2.0 lens **$299.50 Cash or $29.95 Down**; or with famous and ultra-fast Nikkor coated f/1.4 lens **$346. Cash or $34.50 Down.** Eveready carrying case **$10.50.**

Nikkor Wide Angle and Telephoto Lenses

25mm f/4.0 ..... $169.50 Cash or $16.95 Down
28mm f/3.5 ..... **149.50 Cash or 14.95 Down**
35mm f/3.5 ..... **89.50 Cash or 8.95 Down**
35mm f/2.5 ..... **139.50 Cash or 13.95 Down**
85mm f/2.0 with sunshade ..... **175.00 Cash or 17.50 Down**
85mm f/1.5 with sunshade ..... **299.50 Cash or 29.95 Down**
105mm f/2.5 with sunshade ..... **152.50 Cash or 15.25 Down**
135mm f/3.5 with sunshade ..... **135.00 Cash or 13.50 Down**

****

Nikkor 135mm f/3.5 for Exakta ..... **145.00 Cash or 14.50 Down**
Write D. F. A. **today** for FREE Nikon brochure!

MORE of D.F.A.'s 6 Page Guide to the best in Photographic Equipment!

Dowling's
FIFTH AVENUE

Visit our Skyline Suite to say "Hello!"

Hitch your wagon to the star! . . .
1955 CONTAX II-A and III-A

ZEISS IKON

Single-window for rangefinder and viewfinder, metal focal plane shutter, removable back, bayonet lens mount, delayed action release, full built-in flash synchronization are just a few of the reasons for the acknowledged leadership of CONTAX! Contax II-A with Tessar coated f/3.5 lens **$261. Cash or $26.10 Down**; with Sonnar coated f/2.0 lens **$345. Cash or $34.50 Down**; or with Sonnar coated f/1.5 lens **$374. Cash or $37.40 Down**. For Contax III-A (with built-in exposure meter) **add $38. Cash or $3.80 Down.**

Selected Contax Lenses and Accessories

Biogon 21mm f/4.5	$249.00 Cash or	$24.90 Down
Biogon 35mm f/2.8	183.00 Cash or	18.30 Down
Planar 35mm f/3.5	102.00 Cash or	10.20 Down
Triotar 85mm f/4.0	106.00 Cash or	10.60 Down
Sonnar 85mm f/2.0	229.00 Cash or	22.90 Down
Sonnar 135mm f/4.0	146.00 Cash or	14.60 Down
Stereotar C, 35mm f/3.5's	159.00 Cash or	15.90 Down
Stereo Prism Attachment	37.00 Cash or	3.70 Down
Stereo Viewfinder	10.00 Cash or	1.00 Down

1955 ▲ IKOFLEX

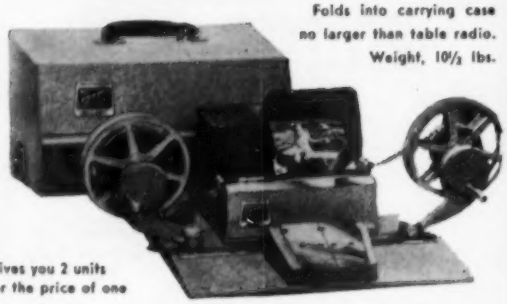
Ikoflex I-A with Novar coated f/3.5 lens in Prontor full synch' shutter **$76. Cash or $7.60 Down; Ikoflex I-A** with Tessar coated f/3.5 lens in Prontor full synch' shutter **$96. Cash or $9.60 Down**; and the superlative **Automatic Ikoflex II-A** with Tessar coated f/3.5 lens in Synchro-Compur MX shutter **$126. Cash or $12.60 Down.**

1955 CONTAFLEX

The gem of all 35mm Single Lens Reflex cameras! Ground-glass eye-level focusing is combined with split image rangefinder. Superb Tessar 45mm coated f/2.8 lens, with fully automatic diaphragm. Contaflex I **$169. Cash or $16.90 Down**; Contaflex II (Built-in meter) **$199. Cash or $19.90 Down.**

CRAIG PROJECTO-EDITOR

Folds into carrying case no larger than table radio. Weight, 10½ lbs.



Gives you 2 units for the price of one

NEW COMBINATION TABLE-TOP MOVIE VIEWER AND COMPLETE EDITOR — Large (3¼ x 4¼ in.) brilliant screen shows action movies without darkening room. Ideal size for family groups. Create slow or fast motion effects by varying speed of take-up reel. Re-run scenes without waiting for end of reel. Stop film to examine individual frames with complete safety to film. Built-in frame marker, splicer and film cement give quick way to cut out poor sections — repair film — arrange movies in story-telling sequence. Has ground and polished condenser lens, straight-through film threading, rotating optical prism shutter and flat field projection lens. Complete with carrying case, 8 mm. or 16 mm. model, **$79.50 Cash or $7.95 DOWN**

A Cordial Invitation...

No doubt about the ease of shopping by mail! . . . But it is nice to meet personally our mail order friends. Whether to say "hello" or to talk cameras, you'll find a warm welcome! Our Mail Order Division is on the 20th Floor (Skyline Suite) of that famous landmark, the Flatiron Building . . . The panoramic view of New York is most photogenic. When you are in our home town, please do stop in!

MORE POWER! MORE LIGHT! PERFECT PERFORMANCE!

Dormitzer SYNCTRON

with the new "million prism" reflectors

New 1955 DB-SM-I Synctron Dry Battery Unit

- Conservative color **guide number of 45**; fast black and white—220.
- **New high-efficiency GE118 flash tube.**
- **Light output**—2650 lumen seconds.
- **Weight**—only 5 lbs.
- **Size**—only 8½" X 2¼" X 6½".
- **Recycling time**—5 to 8 seconds.
- **Flash duration**—1/2000th second.
- **Batteries**—expectancy of 500 flashes; replacement cost only $4.25!

Complete price, including cord and batteries . . . **$115.95 Cash or only $11.59 DOWN**

Other Powerful Dormitzer Synctron Units

Model 100—Professional	$237.00 Cash or	$23.70 Down
Model 200B—Super Pro	275.00 Cash or	27.50 Down
Model 208B—Super Candid	190.00 Cash or	19.00 Down
Model 215—Economy (A.C. only)	72.50 Cash or	7.25 Down
Model 223—Studio Light	495.00 Cash or	49.50 Down

(Prices indicated include battery and charger, except of course with A.C. Model 215.)

FREE Dormitzer Synctron brochure is yours simply by writing to DOWLING'S Fifth Avenue!

UHLER Cine Printers

. . . the standard of perfection!

Uhler 16mm Sound Cine Printer! (illustrated)

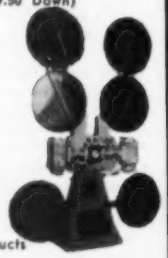
Makes contact prints of both sound and silent pictures in black and white or color. Prints picture and sound at the same time. 400' capacity; beautiful precision finish. Copies of all your favorite films can be made at about one-quarter the cost of the original. It's easy and lots of fun to make your own prints at home. Titles may be made with double exposed motion background as shown in theatres. Complete instructions are furnished with each machine.

$125. Cash or $12.50 Down

◀ (Uhler 16mm Silent Cine Printer **$95. Cash or $9.50 Down**)

Uhler Combination 8mm and 16mm Continuous Printer ▶ (illustrated)

For professional or amateur movie makers, laboratories, schools and technicians—where the highest quality prints are required. Black and white or color; single or double system sound — film is run through the machine once only. 1200' capacity. Printing speed up to 1600' per hour. Lamps are air-cooled. Built-in filter holder for color film printing.



$685. Cash or $68.50 Down

Other Uhler Precision Cine Products

Combination 35mm Continuous Printer for Sound or Silent Pictures (capacity — 6-1200' feed and take-up discs)	$1145.00 Cash or	$114.50 Down
Reduction and Enlarging Printer for 8mm and 16mm (1200' capacity)	1056.88 Cash or	105.68 Down
Reduction and Enlarging Printer for 16mm and 35mm (capacity — 4-1200' feed and take-up discs)	2475.00 Cash or	247.50 Down

Dowling's 175 Fifth Avenue, New York 10, N. Y.

• HOURLY AIR SPEED SERVICE

FREE POSTAGE!

Dowling's

175 Fifth Avenue
NEW YORK 10, N. Y.

1955 LORDOMAT

Amazing new precision "35" from Wetzlar, Germany!

- Interchangeable lenses, all rangefinder coupled
- Rapid wind lever
- Viewfinder and rangefinder in single window
- Built-in self-timer
- Double exposure prevention mechanism
- M-X synchro shutter
- Speeds from 1 second to 1/300th second
- Complete with 50mm f/2.8 Lordon coated lens with click stops

Only $89.50 Cash or . . .

$8.95 DOWN

Lordomat Accessories

(All available from D.F.A. with 10% Down Payment)

Lordonar 35mm coated f/3.5 wide angle lens	$55.00
Telorden 90mm coated f/4.5 telephoto lens	64.50
Combination viewfinder for both lenses	12.50
Deluxe leather eveready case	9.95
Flashgun	7.95

Golden Tone Ekotapes

WEBSTER ELECTRIC

the ultimate in sheer functional beauty and high-fidelity!

- Finger-tip operation
- Single unit control
- Interlocking erase . . . prevents accidental erasure
- Instantaneous speed change to 3¾" or 7½", as desired
- PLUS a host of other features, making Ekotape **your** best tape recorder buy among recorders of the highest calibre

Model 230

EKOTAPE Model 240 (2 speed) ..... **$189.50 Cash or $18.95 Down**
EKOTAPE Model 230 (2 speed; single 5 x 7 oval PM speaker .... **219.50 Cash or 21.95 Down**
EKOTAPE Model 220 (2 speed; automatic speaker silencer; counter; 2 speakers, 5 x 7 oval woofer; 3" tweeter—10,000 CPS guaranteed) ..... **239.50 Cash or 23.95 Down**
EKOTAPE Models 222 and 224 (similar to Model 220 but with 6 x 9 woofer; housed in beautiful LIMED OAK or MAHOGANY table cabinet—please indicate your preference .... **259.50 Cash or 25.95 Down**

FREE Golden Tone EKOTAPE brochure on request, or order directly from DOWLING'S Fifth Avenue **today!**

FREE Postage!

You'll find this so convenient and economical too. No need for you to estimate shipping costs. D. F. A. pays all regular shipping and insurance expenses . . . and guarantees safe arrival of your equipment. This includes A.P.O., F.P.O. and export orders! Upon request, air shipments gladly made; and you'll be billed just for the slight extra cost!

1955 NOVOFLEX

From ultra long-range to close-ups and copying — easily, inexpensively!

Novoflex Reflex Housing

. . . converts Leica, Canon, Contax, etc. to single lens reflex camera:

For Leica and Canon	$ 99.50 Cash or $ 9.95 Down
For Contax	119.50 Cash or 11.95 Down

Novoflex Reflex Housing with Prism Observascope:

For Leica and Canon	119.50 Cash or 11.95 Down
For Contax	139.50 Cash or 13.95 Down

Novoflex Bellows Attachment. . .

light-weight, precisioned gear driven, engraved exposure factors for 50mm and 105mm lenses:

For Exakta and Exa	34.50 Cash or 3.45 Down*
For Praktiflex, Contax S or D and Pentacon	34.50 Cash or 3.45 Down*
For Contax, Leica, Nikon and Canon (w/ Reflex Housing)	34.50 Cash or 3.45 Down
For 2¼ X 2¼ Single Lens Reflexes	72.50 Cash or 7.25 Down

*For this group, Bellows Attachment may be furnished on a double track for $25. Cash or $2.50 Down additional.

Novoflex Accessories:

400mm f/5.6 Novoflex telephoto lens (used with Bellows Attachment)	189.00 Cash or 18.90 Down
Case for 400mm lens	22.50 Cash or 2.25 Down
Combination case for Reflex Housing, Bellows and 400mm lens	26.95 Cash or 2.69 Down

1955 Konica II

One of the Proudest Photographic and Optical Achievements of Postwar Japan!

This exceptional camera performs like a great symphony orchestra. Its splendid design is such that each component part is just "right." And the result is a smoothly performing whole instrument, fully responsive to any photographic task to which it may be assigned . . .

- All controls are visible from the top—operating position
- Single-window range-view finder, with an image unique for size, clarity and brilliance
- World-famous Konirapid-S shutter with nine speeds from 1 sec. to 1/500th sec.
- Built-in flash synchronization
- Brilliant 5-element Hexanon coated f/2.8 lens
- Above all, here is a camera that handles and "feels" just as it should!

NOW only $89.75 Cash or $8.97 DOWN!

Leather eveready case for KONICA II	$9.75
Autoup (20" to 40")	9.00
Sunshade	1.75

It "pays" to order your new KONICA II directly from DOWLING'S Fifth Avenue. Your order will be expertly packed for shipment, with safe arrival guaranteed. Take advantage of our famout Air Service, if time is short. Chances are this will make your new KONICA II not more than a day away—whether you live in Tacoma or Tallahassee! Yes, we are usually "closer" than a local store. Most important: We have it in stock; and your purchase is backed by our unconditional guarantee of satisfaction, or your money back within 30 days. Always shop the **easy** way—the D. F. A. way—by mail! It's a **good** habit!

TURN THE PAGE FOR ***STILL*** MORE EXCEPTIONAL PHOTOGRAPHIC EQUIPMENT BY DOWLING'S FIFTH AVENUE. YOU'LL FIND A HANDY COUPON FOR ORDERING!

Dowling's
175 Fifth Avenue
NEW YORK 10, N. Y.

wanted now TRADE-INS

Mail YOUR trade-in TODAY to D.F.A. for an unprecedented allowance! Your trade-in may be applied as down payment!

Dramatic New Approach to Tape Recording

THE SUPERB **Pentron** PORTABLE TAPE RECORDER

With Exclusive **MONOMATIC** CONTROL

MONOMATIC is a single knob control providing instant selection of Record or Play in either 7½ or 3¾ tape speeds as well as Fast Forward and Fast Rewind. Any position may be selected by a flick of the finger, in either tape speed.

Model CT-1
Dual Track Dual Speed
$129.50
Cash or only $12.95 Down

- Plays in any position!
- Simplest to operate
- High fidelity performance
- 2-speed, 2-hour operation

DOWLING'S Fifth Avenue also features
Pentron Multi-speed Portable Tape Recorder.
$189.50 Cash or $18.95 Down
Pentron 3 Speaker High Fidelity Tape Recorder for life-like dimensional presence.
$225.00 Cash or $22.50 Down

Hi-fi enthusiasts! Write D. F. A. for free brochure on Pentron low cost high fidelity tape components for portable use and custom installations!

Now YOU can ADD SOUND to your silent movies at an amazingly low price!

CINESONE
Magnetic Sound Adapter Unit

For the first time at a sensible price, you can make your silent films — both black and white and color — come to glorious life . . . adding music, dialogue or commentary that challenges the finest professional talkies for quality. No need to buy a projector. Cinesone fits all 8mm and 16mm projectors — silent or optical sound.

Cinesone Model A includes adapter, and lead wires ready for plugging into Revere, TDC or Masco tape recorders ..... $ 99.75 Cash or $ 9.97 DOWN
Cinesone Model PA includes adapter and pre-amplifier (for use with Pentron or any recorder, optical sound projector, TV or radio set, amplifier etc.) ..... 155.00 Cash or 15.50 DOWN
Cinesone Model C includes adapter, complete amplifier, extension speaker, microphone and carrying case . . . all the equipment you need to make professional sound movies ..... 199.75 Cash or 19.97 DOWN

Our FREE booklet gives you full information about Cinesone — "Your Soundest Investment In Home Movie Making!"

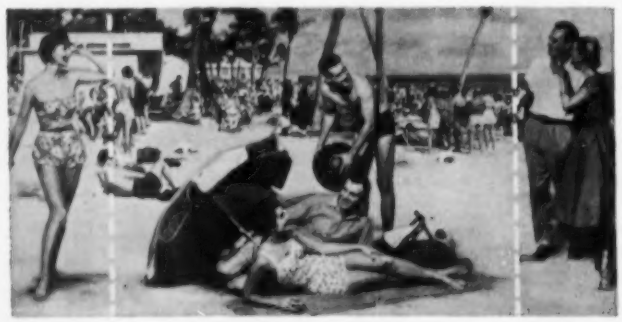
ALL EQUIPMENT LISTED IN THESE SPECIAL D. F. A. PAGES IS BRAND NEW — FACTORY PACKED, FULLY GUARANTEED BOTH BY THE MANUFACTURER AND BY DOWLING'S Fifth Avenue!

VISTASCOPE
Now! Full Dimensional Realism in Your Home Movies!

The wide screen — Cinemascope etc. — has become an accepted addition to all moviegoers. Now VISTASCOPE brings home movie makers the most significant development since the advent of color. You will bring right into your own living room the same kind of spectacular anamorphic pictures that you are seeing in theatres!

In shooting you now have a 36 degree lens angle — giving your movies 50% more width than formerly, without decreasing height! There are no color errors or visible linear distortion, unlike movies filmed with ordinary wide angle lenses or previously marketed cylindrical anamorphic lenses. It's possible to put 50% more view on the same area of film, with this new anamorphic or "squeeze" system. In a sense, it's as if a $100. bill should suddenly be worth $150.!

Your present home movie outfit needs only one VISTASCOPE. One Vistascope lens is used on both your camera and projector. You load your camera with standard film, and process it in the usual way. Use your camera and projector as you would normally. No technical experience is necessary. Moreover, you'll take more beautiful movies than you believed possible because with Vistascope you **cannot** take distorted home movies!



VISTASCOPE Lens for 8mm Camera and Projector.
$ 75. Cash or only $ 7.50 Down
VISTASCOPE Lens for 16mm or 35mm Cameras and Projectors.
$125. Cash or only $12.50 Down

NOW . . . 50% more with VISTA-SCOPE

• The Movie Format of Yesterday •

NOW . . . 50% more with VISTA-SCOPE

DOWLING'S Fifth Avenue has FREE booklet describing VISTASCOPE in detail. Please write!

USE COUPON ON NEXT PAGE TO REQUEST YOUR COPY OF OUR COMPLETE NEW 1955 CATALOG . . . IT'S FREE! MEANWHILE BUY ANY CURRENTLY ADVERTISED PHOTOGRAPHIC PRODUCT FROM D. F. A. JUST SEND IN YOUR ORDER TODAY!

Dowling's FIFTH AVENUE

10% DOWN

NO EXTRA CHARGE FOR CREDIT

NO INTEREST!

• 30 DAY FREE TRIAL • LIFETIME GUARANTEE

• FREE POSTAGE AND INSURANCE TO ALL POINTS, INCLUDING APO'S AND FPO'S. HOURLY AIRSHIPMENTS EVERYWHERE.

EASY PAYMENTS FOR CIVILIANS AND SERVICEMEN THE WORLD OVER!

The incomparable new 1955 Leica M-3

Leica M-3 w/ Elmar coated f/3.5 lens **$348. Cash or $34.80 Down**
Leica M-3 w/ Summicron coated f/2.0 lens **447. Cash or 44.70 Down**
Leica M-3 w/ Summarit coated f/1.5 lens **468. Cash or 46.80 Down**
Leica M-3 Body without lens **288. Cash or 28.80 Down**

LEICA M-3 ACCESSORIES

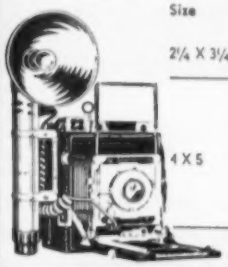
Summaron-M coated 35mm f/3.5 lens	$ 99.00 Cash or	$ 9.90 Down
Elmar-M coated 90mm f/4.0 lens (standard mt.)	93.00 Cash or	9.30 Down
Elmar-M coated 90mm f/4.0 lens (collapsible)	150.00 Cash or	15.00 Down
Hektor-M coated 135mm f/4.5 lens	141.00 Cash or	14.00 Down
Leica Meter-M	30.00 Cash or	3.00 Down
Adapter, standard Leica lenses to M-3	10.50 Cash or	1.05 Down

OTHER SUPERB NEW LEICA PRODUCTS

Stemar (Leica Stereo), complete	$297.00 Cash or	$29.70 Down
Valoy II Enlarger	96.00 Cash or	9.60 Down
Leica IIf with Elmar coated f/3.5 lens	$177.00 Cash or	$17.70 Down
Leica IIf with Summaron coated f/3.5 lens	216.00 Cash or	21.60 Down
Leica IIIf with Elmar coated f/3.5 lens	237.00 Cash or	23.70 Down
Leica IIIf with Summaron coated f/3.5 lens	276.00 Cash or	27.60 Down
Leica IIIf with Summicron coated f/2.0 lens	336.00 Cash or	33.60 Down
Leica IIIf with Summarit coated f/1.5 lens	357.00 Cash or	35.70 Down

1955 Pacemaker GRAPHIC OUTFITS

All brand new, latest models, with factory guarantee! Includes: • Graflok back • Ektalite screen • new Graphic coupled rangefinder with Rangelite and automatic parallax viewfinder • new full image wire finder • Graflite 3 cell flash gun • deluxe case • film pack adapter or roll film holder • 6 cut film holders • adapter ring • sunshade • 4 filters. Prices below include all this extra equipment! Easy payments available!



Size	Coated Lens in Shutter	Speed Graphic	Crown Graphic
2¼ X 3¼	101mm Ektar f/4.5 (1/800 sec.)	$338.	$300.
	105mm Tessar f/3.5	355.	306.
	105mm Ektar f/3.7	343.	294.
4 X 5	135mm Schneider Xenar f/4.7	337.	291.
	135mm Optar f/4.7	354.	305.
	127mm Ektar f/4.7	354.	305.
	135mm Tessar f/4.5	370.	326.
	150mm Schneider Xenar	381.	334.
	150mm Tessar f/4.5	381.	334.
	152mm Ektar f/4.5	371.	327.
	135mm Schneider Xenar f/3.8	388.	344.
	150mm Tessar f/3.5	448.	400.
	150mm Schneider Xenotar f/2.8	548.	524.

New Graphic rangefinder is manufactured for 4 X 5 cameras only. 2¼ X 3¼ outfits are supplied with Kalart coupled rangefinder.

New 1955 Revere 800 Automatic Projector

Runs by itself! Model "553" (300 watt, automatic) **$69.50 Cash or $6.95 Down;** Model "555" (500 watt, automatic) **$79.50 Cash or $7.95 Down;** Model "888" (500 watt fully automatic) **$119.50 Cash or $11.95 Down.**

1955 MINOX III. S

Fabulous! Weighs 2½ ozs.; 3" long. Automatic transport takes 50-exposure film. Built-in flash; 9 speeds to 1/1000th sec.; sharp f/3.5 lens. With case and chain **$139.50 Cash or $13.95 Down.** Accessory reflex finder **$27.50;** right-angle finder **$14.95.**

1955 GRAPHIC 35 Just Out!

Years ahead in modern design and performance! New coupled rangefinder with Push-Button focusing; full flash synch' with Spectramatic settings; Graflar coated f/3.5 lens. Only **$77.50 Cash or $7.75 Down.** Complete with flash unit and case **$89.50 Cash or $8.95 Down.**

New 1955 Automatic Exakta VX

With fully automatic diaphragm lens listed: Tessar f/2.8 **$259.50 Cash or $25.95 Down;** Westagon f/2.0 **$289.50 Cash or $28.95 Down;** Biotar f/2.0 **$345. Cash or $34.50 Down;** Xenon f/1.9 **$351.70 Cash or $35.17 Down.** With Pentaprism R/F add **$47. Cash or $4.70 Down.**

ALL NEW 1955 RETINA IIIc

Built-in exposure meter and with normal Xenon coated f/2.0 lens in M-X shutter — **$185. Cash or $18.50 Down.** Optional: Curtar 35mm coated f/5.6 wide angle lens **$62.50 Cash or $6.25 Down;** Longar 80mm coated f/4.0 telephoto lens **$82.50 Cash or $8.25 Down.** Retina IIc **$135. Cash or $13.50 Down.**

new 1955 BESELER Enlargers

Takes negatives from 16mm to 4 X 5 without changing condensers! Has automatic electric motor. 4 X 5 Model **$198.75 Cash or $19.87 Down;** 5 X 7 Model **$239.75 Cash or $23.97 Down.**

1955 Linhof Super Technika Cameras

4 X 5 model with multifocus rangefinder, universal back and 150mm Xenar coated f/4.5 lens **$419.70 Cash or $41.97 Down.** Linhof 2¼ X 3¼ outfit with multifocus rangefinder and 3 lenses complete **$564.15 Cash or $56.41 Down.**

1955 POLAROID Land Cameras

Picture in a minute! Sensational NEW Polaroid Highlander **$69.95 Cash or $6.95 Down.** Speedliner **$89.75 Cash or $8.97 Down.** Deluxe Pathfinder with coupled rangefinder **$249.50 Cash or $24.95 Down.**

1955 HASSELBLAD Model "1000-F"

—superlative 2¼ X 2¼ single lens reflex with crisp Ektar coated f/2.8 and speeds to 1/1000th sec.: **$379.50 Cash or $37.95 Down.** NEW Super-wide Model with 38mm Zeiss Biogon coated f/4.5 lens **$489.50 Cash or $48.95 Down.**

NEW Models 1955 Rolleiflex

Rolleiflex with Xenar f/3.5 **$217.50 Cash or $21.75 Down;** or with Tessar f/3.5 **$232.50 Cash or $23.25 Down.** Rolleiflex 2.8C, either Xenotar f/2.8 or Zeiss Planar f/2.8 **$291.50 Cash or $29.15 Down.** Rolleicord V with Xenar f/3.5 **$134.55 Cash or $13.46 Down.**

1955 HERMES Rocket Typewriter

World's lightest (only 8 lbs.), yet the best! Keyboards available in over 70 languages. Built to "take it" by Bolex camera people. Perfect for servicemen, travelers and you! Including case, only **$73.67 Cash or $7.36 Down.**

Complete 1955 Keystone 5-Unit Movie Outfit

Top-quality Olympic 8mm turret camera with normal f/2.5 lens, Kinotar wide angle f/2.5 lens, Kinotel telephoto f/3.5 lens, latest Brockway M-3 exposure meter, plus roll 8mm Kodachrome film. **Complete $139.50 Cash or $13.95 Down.**

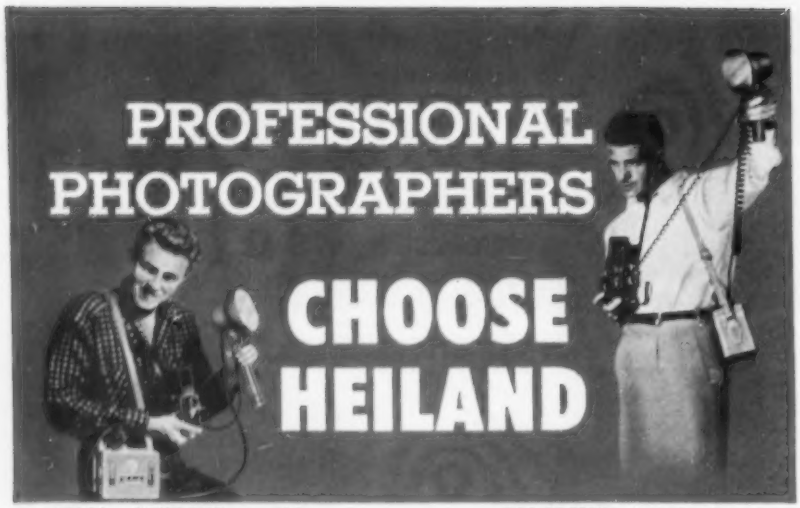
ALL EQUIPMENT LISTED IS BRAND NEW—FACTORY PACKED. OUR STOCKS OF BOTH USED AND NEW EQUIPMENT ARE HOWEVER MOST EXTENSIVE. PLEASE WRITE FOR ANYTHING PHOTOGRAPHIC

Dowling's 175 FIFTH AVENUE, NEW YORK 10, N. Y.
In a N. Y. Landmark, the Flatiron Bldg. at 23rd St.
Mail Order Showroom, Suite 2000. Tel.: ORegon 4-7900

Please ship the following immediately: _____ P-955

Enclosed is $_____. ☐ Down Payment ☐ Complete Payment.
I agree to pay $_____ monthly for_____ months until merchandise is paid for.
I wish to trade in: _____
☐ Give me tentative allowance by mail.
☐ I am shipping equipment for exact allowance.
Your trade-in may be used as down payment! It will be returned at D.F.A.'s expense if you don't accept our top offer.
☐ Send FREE literature on _____
☐ Send FREE 1955 Catalog. ☐ Send pamphlet on "Deferred Payments."
Name _____
Address _____
City or Town _____ State _____

MAIL TODAY



PETER GOWLAND, world-famous for his glamour girl photos, says, *"I've used Heiland equipment for years. I know it can be depended on in all circumstances!"*

PAT COFFEY, whose free-lance work appears regularly in magazines such as THE SATURDAY EVENING POST, says, *"Thousands of good flash pictures have proved to me that Heiland units do the job."*

For years Heiland has been the first choice in flash equipment among professional photographers—whose very success depends on getting the best photographs! They know that Heiland units give them unmatched versatility and convenience of use. The professionals use Heiland flash units for every type of photograph—for flash fill in sunlight; as the primary light source inside; to increase illumination without destroying existing light patterns.

Take a tip from experts and let a Heiland flash unit on your camera help you to better pictures!

IN ELECTRONIC FLASH

Three popular models from Heiland's complete line

STROBONAR SEVEN

Amazingly compact and lightweight, yet built to professional quality standards for years of trouble-free operation. Choice of 3 power paks, to fit your exact need. Flashes pictures for 1 cent or less.

STROBONAR SIX

For professional type use. Will flash one shot right after another without loss in light output. Exclusive "high-low" switch on lamphead cuts light output to ¼ normal—permits extreme close ups with fast films.

STROBONAR FIVE

The ideal unit for all-around use. Strong light output—yet small in size, light in weight. Choice of many professionals!

Distributed in Canada by W. E. Booth Co., Ltd., Toronto

Heiland® H HONEYWELL A DIVISION OF MINNEAPOLIS-HONEYWELL

130 EAST FIFTH AVENUE • DENVER 3, COLO.

almost unanimously switched over from expendable flash to speedlight) have made the prospect of a weatherproof shutter rather discouraging for the indefinite future.

SPE's 1955 Conference. The scientific philosophy, ingenious experimental activity, and actual presence of Dr. Edwin H. Land, president of the Polaroid Corp., was easily the most noteworthy feature of the recent West Point (N. Y.) Conference of the Society of Photographic Engineers sponsored by the U. S. Army Signal Corps. As in years past, there was an equipment exhibit and the usual quota of technical papers conforming to the Society's all-encompassing definition of "photographic engineering." Many interesting applications and descriptions of photographic equipment and materials studded the three-day papers session. But it remained for Dr. Land, on the occasion of his receiving the SPE Progress Medal for 1955, to bring the conference into focus with a re-definition of the role of photographic engineering in the scheme of things, and a brilliant demonstration of a unique additive color process with which he has been conducting experiments.

Dr. Edwin H. Land receives 1955 SPE Progress Medal from SPE president Leo Pavelle.

Land asserted that the photographic engineer is incapable of functioning successfully as a separate entity. Photographic progress, he insisted, was the product of "the scientist working in an inter-molecular relationship with the engineer." He was obviously referring to the method that has been employed so successfully in his own company's development of the world-shaking Polaroid-Land one-step (pictures-in-a-minute) photography system, as well as their earlier and somewhat less dramatic light-polarizing systems and products. For he concluded with an outline of the manner in which his research teams conferred continuously with the product development people in his organization.

The color demonstration that followed Dr. Land's receipt of the Progress Medal at the Thursday evening (May 19) session was prefaced by his statement that the process to be shown represented nothing more than a scientific exercise and was in no way related to Polaroid's instantaneous color process, about which

Film Base. A paper by John M. Centa of the Du Pont Photo Products Division

there has been a smattering of patent information and a great deal of speculation in the past few years. Briefly, the demonstration was a matter of producing a screen image in "natural" color from a pair of black-and-white positive transparencies of the same subject projected in register through a red filter and by white light without a filter, respectively. The "red image" had originally been exposed through a red color-separation filter whereas the "white image" of the subject has been exposed through a "green" filter—both on Polaroid's experimental panchromatic one-step positive transparency material. Dr. Land explained that a large, powerful lamp was used on the red side of the projector (a modified stereo transparency projector) and a relatively small bulb with a variable brightness adjustment on the white side. When a multi-colored still-life of a fruit arrangement was shown with the brightness of the two projected images evenly balanced, the red and orange hues were brilliant, blues and greens were quite natural, but yellows were weak. As the brightness of the white image was increased, the blues and greens became more brilliant, the yellows faded even further and the orange-red end of the spectrum was dulled somewhat. When the white-light intensity was decreased, the blues and greens became grayish, the yellows became quite pronounced, and the reds became very saturated and prominent.

When a pair of red and green separations of a set of nine Kodak Color Control Patches and a Kodak Gray Scale were projected through the ingenious additive system, the effects on the respective color hues of increasing and decreasing the intensity of the white projection lamp through the green-record transparency were confirmed, but the relationship of the steps in the gray scale were not affected in any way. In other words, the neutrality of hue and the contrast and gradation remained the same. In an attempt to answer the question as to whether or not his additive system produced a color image that was any "less natural" than that produced by an ordinary Kodachrome (subtractive) transparency, Land projected half of a Kodachrome scene including a green field and sky side-by-side with half of a red-and-"white" additive image of a white church spire against a blue sky—on the same screen. The Kodachrome appeared to be muddier and duller over-all, although when the Kodachrome was viewed alone, it seemed quite brilliant and most acceptable; and the additive image, alone, seemed too light and airy. What about dyeing and superimposing the red and green record transparencies on a white opaque base? Dr. Land showed the results of this treatment with the still life of the fruit. The red and orange hues were quite acceptable, but the rest left much to be desired. He concluded that this phase of the experiment was the subject of further study.

Probably the most significant new development for general photography described at the West Point papers sessions was Du Pont's new "Cronar" Polyester

GORDON KUSTER, Sr., Director of Photography for the COLUMBUS DISPATCH, says, *"I've learned from experience that my Heiland flash gun is trustworthy under all conditions. It's Heiland for me!"*

FLOYD McCALL, Executive Head of the Photographic Department of the DENVER POST, says, *"I've used the Strobonar V ever since it has been on the market, and it has made thousands of perfect flash pictures for me."*

In the news photography field—where there's seldom a second chance to get the picture—the overwhelming choice is Heiland. Over 5 out of 6 newspapers in the United States use Heiland flash equipment!

Press photographers have learned from long experience that Heiland units can be depended on for faithful performance in all circumstances—for trouble-free service year after year.

There's a Heiland flash unit to fit every camera, every purse. Stop in your photo dealer's soon and select the one that fits your needs best.

IN CONVENTIONAL FLASH

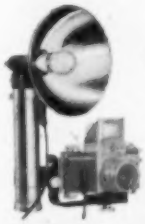
Three popular models from Heiland's complete line

PRESS MODEL S

The finest press synchronizer in the world! Features Heiland's Electromatic Coil for remote shutter tripping and split-second synchronization.

SYNCHRO-MITE

It's packed with extra-quality features! Highly polished reflector gives excellent results with midget bulbs. Gives years of dependable, trouble-free service.



SYNCHRO-CUSTOM

Professional quality at reasonable cost. Flex-focus reflector adjusts for proper light at any distance. Can be used off camera for better light control.

Heiland® H HONEYWELL A DIVISION OF MINNEAPOLIS HONEYWELL

130 EAST FIFTH AVENUE • DENVER 3, COLO.

Now

YOU CAN AFFORD THE **BEST!**

Minolta HIGH-PRECISION REFLEX CAMERAS

Minolta cameras have the features of the most costly twin-lens reflex cameras, plus exclusive advantages not found in the most expensive makes. They are manufactured by Chiyoda Kogaku Seiko, K.K., one of the world's most popular camera manufacturers, who, since 1927, has been producing a complete line of Minolta top-quality photographic and optical equipment exclusively, making the entire product, including lenses.

No other company, anywhere in the world, boasts higher standards throughout every step of the way. From the initial design to the finished product, there are ethical and production rules that must be strictly adhered to. It is no wonder, then, that Minolta Means More, in any language.

Minolta AUTOCORD FULLY *Automatic*

HELICAL FOCUSING LEVER, actuated by index finger of hand supporting camera, sweeps focus from 3 ft. to infinity in a single stroke. Automatic film transport advances film, counts the exposure, and sets shutter. TAKING LENS is ROKKOR 75mm F/3.5, 4-element, highly color corrected and coated. VIEWING LENS is ROKKOR 75mm F/3.2, 3-element, fully coated. OPTIPER MXS PRECISION SHUTTER, synchronized at all speeds from 1 second to 1/400th and bulb, with built-in self timer and safety-locking body shutter release. $99.50 list

SEMI *Automatic* **Minoltacord**

HELICAL FOCUSING LEVER adjusts focus. FILM TRANSPORT LEVER advances film. COCKING LEVER sets shutter. TAKING LENS, PROMAR SIII 75mm F/3.5, fully coated. VIEWING LENS is F/3.2, OPTIPER MXS SHUTTER synchronized at all speeds from 1 second to 1/400th and bulb, with built-in self timer. $69.50 list

DOUBLE GUARANTEE

In addition to Chiyoda Kogaku's unconditional guarantee, Minolta cameras bear the guarantee of our exclusive U. S. Sales Agents, the FR Corporation—an iron clad combination for your satisfaction and protection. For literature write to:

The FR CORPORATION
951 Brook Avenue, New York 51, N. Y.

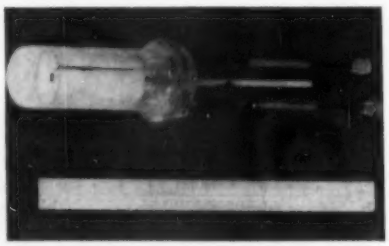
Manufacturers of Fine Cameras and Lenses since 1927.

CHIYODA KOGAKU SEIKO, K. K., OSAKA, JAPAN

NEW YORK OFFICE: 150 Broadway, New York 38
In Canada, Anglophoto Ltd., Montreal, Toronto, Vancouver

Film Base. A paper by John M. Centa of the Du Pont Photo Products Division, Parlin, N. J., presented a great deal of physical data about the material. In sum, the new material, which is now being produced on a pilot-plant basis, is (1) unique in its smoothness, which should give more sharpness and better resolution than conventional cellulose-acetate safety-base films under critical use conditions (2) endowed with very high tear strength from a nicked edge; (3) possessed of great fold endurance, which should make it extremely desirable for coating roll-film emulsions and also for use in high-speed motion picture cameras which tend to torture the film at the end of the camera run; (4) invested with much more dimensional stability than conventional film bases when subjected to extremes of temperature and about the same stability when subjected to varying humidity; (5) slow-burning, and (6) on the basis of accelerated ageing tests, longer lasting than conventional film-base materials. Chemically, "Cronar" is related very closely to "Mylar," which is used as a base for magnetic recording tape, and also to "Dacron" fabric. In answer to questions from the audience, Mr. Centa stated that splicing of the new Cronar base was best achieved with pressure-sensitive adhesives; butt-welding (by heat) is also moderately successful, whereas conventional methods used in current practice are not satisfactory.

Of the commercial exhibits on view at West Point, the LogEtron, an automatic servo-controlled scanning light source for automatic dodging in contact printing, was the subject of much interest. A complete description of the apparatus and its operation was published in a paper by Dwin R. Craig in Volume 5, No. 4 (1954) of *Photographic Engineering*, official journal of the SPE . . . Sylvania Electric Products, Inc. had a traffic stopper in their new RF Lamp for projection and printing. This revolutionary lamp is neither an incandescent nor an arc type of light



Sylvania RF projection and printing lamp provides more even illumination than has ever before been possible—up to 4000 K.

source. Its light-emitting element is a disk of an irreducible, non-oxidizable hard metal which is operated by induction heating with radio frequency waves. In addition to being able to illuminate the film gates of projectors more uniformly than has heretofore been possible, the RF Lamp is capable of being operated up to a color temperature of 4000 K with substantially higher light transmission than is possible with tungsten filament lamps of the same brightness.—

Vo 5215

200 Years of Tradition

VOIGTLÄNDER'S

Exports Grew by Themselves

P. F. W. Voigtländer's first metal camera and first precision lens attracted world-wide attention. Orders for it came in from all the countries of Europe. As early as 1862 more than 10,000 Voigtländer lenses were shipped by the two Voigtländer factories. The export of cameras and lenses increased rapidly. Since the first shipments millions have been distributed all over the world.

Today – two out of every three Voigtländer cameras are exported from Braunschweig, Germany, to 86 countries. An amazing record – and the natural result of centuries of experience and TRADITION.

Voigtländer Cameras differ from each other according to their individual properties, but scientists and amateurs alike will find the one which suits them best.

VOIGTLÄNDER A.G.,
BRAUNSCHWEIG,
WESTERN GERMANY

Sole Agents:
USA: Willoughbys Wholesale,
Voigtländer Division,
110 West 32nd Street,
New York 1, N.Y.

Branches:
111 New Montgomery Street,
San Francisco 5, Cal.
138 Cole Street, Dallas 7, Texas

Sole Agents Canada:
Gevaert (Canada) Limited
345 Adelaide Street West
Toronto, Ont.
Montreal · Vancouver

Your local dealer will be glad to give you a demonstration.

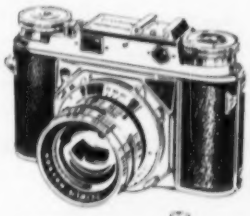
Regardless whether

the **PROMINENT** 35 mm miniature camera, Synchro-Compur Shutter, fully synchronized up to 1/500 sec. Range finder with Automatic Coincidence Compensation (patented).

Range of new interchangeable high-efficiency lenses:
the COLOR-SKOPAR f/3.5, the ULTRON f/2, the NOKTON f/1.5, wide angle SKOPARON f/3.5, telephoto lens DYNARON f/4.5.

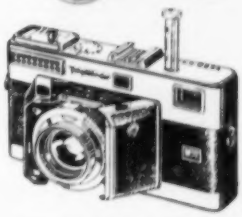
Prices: $ 157.50 with COLOR-SKOPAR f/3.5
$ 220.00 with ULTRON f/2
$ 270.00 with NOKTON f/1.5
$ 12.50 Eveready Carrying Case.

Simple to operate, reasonably priced, a camera to overcome all photographic problems!



or the **VITESSA L** 35 mm miniature camera with world-famous ULTRON f/2, Light-Value Compur Shutter and built-in exposure meter **which makes picture taking simple as child's play and as much fun!**

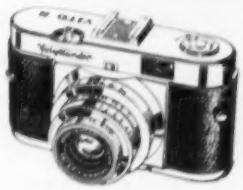
Price: $ 159.50
$ 10.50 Eveready Carrying Case.



or the **VITO B** with world-known Color-Skopar f/3.5, Prontor SVS Shutter at an unbelievable low price with the most up-to-date technical features.

Price: $ 54.50
$ 8.25 Eveready Carrying Case

So small, so light, so streamlined for easy handling.



Voigtländer **because the lens is so good**

Sensational development

FOR HIGH FILM SPEED

ILFORD MICROPHEN
Fine Grain Developer

Now you can obtain fine grain development without loss of film speed, even with negatives intended for enlargements.

ILFORD MICROPHEN is a new type of developer* with a PHENIDOME** base, affording a high speed/grain ratio—a ratio significantly greater than that of conventional developers.

ILFORD MICROPHEN has excellent keeping qualities, a long working life and exceptional consistency of performance.*

In powder form for working strength solution of

600 cc (21 oz.)	List $ .95
2.5 litres (88 oz.)	List 2.60
13.5 litres (3 gal.)	List 10.50

** See your copy of July Popular Photography, page 100 for complete editorial on a comparison of MICROPHEN with other conventional developers.*
*** Registered.*

MICROPHEN REPLENISHER

2.5 Litres for (88 oz.) of working strength solution.

List $3.25

A special replenisher for MICROPHEN when used in large tanks. Maintains activity of bath constant over a long period.

Imported and distributed by

ALCO PHOTO SUPPLY CORP.

902 Broadway, N. Y., N. Y.

Write for full description data and give us the name of your dealer.

camera clubs

by Whit Hillyer

Kids Are Where You Find Them

Juvenile delinquency gets frequent mention in the public prints these days. Adults—and some of the kids as well—ask one another what this country's coming to. Vandalism and worse things continue to crop up. It happens in rural areas as well as in the cities. True, the farming and cattle-raising territories have one pretty good preventative in the 4-H movement. But even in the country you can find youthful gangs loafing around the main drag at night, constituting accidents about to happen.

Now, I'm certainly not going to say that photography is the magic treatment which will knock juvenile crime waves and vandalism into oblivion. But it can help. It has its definite appeal to the teen-agers, and some of them get pretty adept at it in no time at all. Evidence of progress in this direction is found abundantly in the pictures turned out for National Scholastic, Freedoms Foundation, and other competitions. And this year for the first time a teen-ager is a featured expert on the PSA convention program. (See the item on this below.)

Comes now the *Midwood Camera Club* of Brooklyn, N. Y., with an idea which I present for emulation by your own group. This autumn, *Midwood* is inviting young men in its bailiwick to sit in on club meetings, lectures, and demonstrations. For something like 15 cents per week, each of these lads will enjoy all benefits of the club. He will meet and associate with wholesome companions, learn about photography, get a crack at darkroom work in the evenings (in his own home or in that of a club member). It's a good, constructive idea, and cannot fail to accomplish at least something. (Incidentally, if you live in Brooklyn and know of a lad who's a likely candidate, write to *Midwood's* Fred Waldhauer, 1202 East 38th St.)

The *Midwood* people undoubtedly have their own good reasons for leaving the gals out of this picture, and I do not question them on that point. However, I do suggest that other groups with similar plans might well consider including the chicks in the act. This is particularly recommended where a club has on its roster one or more capable woman photographers — and there are plenty of them!

Perhaps juvenile delinquency isn't a problem in your community. Perhaps you just *think* it isn't—have you checked this out with the authorities? Possibly there's a good photography program already going at the high school or the YMCA. In the latter case, tie into it—there's always room for help and encouragement. In any of the former situations, better reconsider. I certainly hate platitudes, and I wouldn't want to sound stuffy—but at the considered risk of doing so, I'll say in all sincerity that the kid you save may be your own.

Teen-ager to Address PSA

Taking his place beside older experts on the 1955 convention program of the *Photographic Society of America* will be 17-year-old Torrey Jackson of Marblehead, Mass. Jackson will address the gathering on the subject of wild-bird portraits, a field in which he has established an enviable record. He will illustrate his talk with examples of his work.

Other speakers at the convention, which will be held October 5-8 in Boston, Mass., include Ansel Adams, L. Whitney Standish, Dr. Edwin H. Land, Dr. Harold E. Edgerton, John Doscher, and Fred Bond.

Shows for Exchange

Co-Ed Camera Club of the YMCA, Fort Wayne, Ind., has a print show available for exchange. Also available is a slide collection, which can be obtained either on an exchange basis or by clubs in need of program material. Correspondence regarding either show should be addressed to Jack Root, Route 1, Spencerville, Ind.

We hear that *Bloomfield Hills Camera Club's* ex-president and wandering ambassador, Edward G. Batty, turned up awhile back at *Baltimore Camera Club*, where he helped judge prints and slides entered in a Women's Civic League contest. Sure gets around.

Having done an outstanding job as president of Chicago's *Metro Movie Club*, Andy Graham has stepped down to enjoy a well-earned rest. *Metro* is the outfit which meets every week, and you can imagine what a load that schedule puts on the officers. Another *Metro* wheelhorse, Art Barcal, steps into Andy's shoes, and should do a comparably fine job. Few clubs enjoy the outstanding leadership found at this one.

Denver Council of Camera Clubs really has done things to its "Photogram." Beautiful bleed cover on a recent issue was an excellent photograph, very nicely reproduced.

I note here with sincere regret the untimely passing of Carl Sanchez, APSA, ARPS. Carl was one of the more active people in amateur photography—a hard worker and a sincere person. He was a past president of *Pictorial Photographers of America* (Brooklyn, N. Y.).

Redlands (Calif.) *Camera Club's* Photo Fiesta always rates space here. The 1955 version—seventh annual—was scheduled for July 31, and any photographer within driving distance is crazy if he didn't take it in. Last year, some 3,000 did. I'm impatiently awaiting the arrival of a picture of Miss Photo Fiesta 1955. If she's up to her predecessors she'll be decorative indeed.

Is your club on our mailing list? If not, please send name and address to: POPULAR PHOTOGRAPHY, Department 307, 366 Madison Ave., New York 17, N. Y.

MINIFILM'S SWEET 16

WE'RE 16 YEARS OLD AND HERE ARE 8 PAGES OF THE SWEETEST DEALS EVER OFFERED!

8 PAGES

Celebrate with us... Take your pick

CRAMMED FULL OF ONCE-IN-A-LIFETIME BARGAINS!

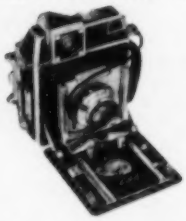
8 PAGES

FOR ONLY A LITTLE MORE ... All the Added Advantages of a Linhof SUPER TECHNIKA

You enjoy unlimited camera versatility whether you choose the 2¼ x 3¼ or the 4 x 5 — all the flexibility of a view camera and the convenience of a press camera.

BUY TODAY—TAKE TIME TO PAY

SUPER TECHNIKA 23



Built-in Multifocus Prism Rangefinder couples to as many lenses as desired. Coupling cams are interchangeable. Each serves three lenses. Other features include: Vari-View Optical Finder—Back Swings and Tilts—Lens Movements—Revolving Back—Triple Extension Bellows — Drop Bed — All-Metal Construction, etc.

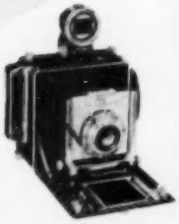
Super Technika 23 One-Lens Outfit with 105mm Xenar f3.5 in Synchro MX Compur Rapid $399.70

ONLY $39.97 down

Super Technika 23 Three-Lens Outfit with 105mm Xenar f3.5, 65mm Angulon f6.8 and 180mm Tele-Xenar f5.5 all in Synchro MX Compur Rapid Shutters $569.90

ONLY $56.90 down

SUPER TECHNIKA 45



Built-in Multifocus Prism Rangefinder couples to as many lenses as desired. Has large interchangeable coupling cams. Other features include: Back Swings and Tilts—Lens Movements—Revolving Back—Triple Extension Bellows—Drop Bed—Universal Back with Kodak Ektalite Field Lens—All-Metal Construction, etc. (Multifocus Viewfinder, as illustrated, is optional).

Super Technika 45 with 127mm Press-Xenar f4.7 in Synchro MX Compur Rapid $394.70

ONLY $39.47 down

TRADE UP TO A LINHOF... THE FINEST CAMERA YOU WILL EVER OWN

FOR THOSE WHO WANT THE VERY BEST THERE IS BUT ONE CAMERA ... THE VERSATILE ALL-IN-ONE

ALPA 35MM CAMERA

PRECISION BUILT IN SWITZERLAND

EXCLUSIVE ALPA FEATURES:

1. 50mm Kern Switar f1.8 Apochromat. The only Lens in the entire 35mm field which corrects all 3 primary colors and assures unsurpassed definition and brilliance up to the corners, even at full f1.8 aperture.
2. Optional focusing: Kern Prism Reflex OR individual Coupled Rangefinder.
3. Built-in adjustable multifocal viewfinder for standard and accessory lenses.
4. One knob for winding and shutter settings from 1 second to 1/1000, as well as intermediate speeds.
5. Eveready Case holds ALPA with wide angle 50, 75, or 90MM Lens Plus Sunshade, Filters, and Exposure Meter.
6. The world's most compact, most complete, most versatile single lens Reflex Camera.

BRAND NEW ALPA 7
WITH 50MM COATED F1.8 KERN SWITAR APOCHROMAT

Cash $459.

45.90 DOWN!

With F1.9 XENON AUTOMATIC $429 $42.90 DOWN

ALL ALPA LENSES ARE UNCONDITIONALLY GUARANTEED

Twice Inspected, they must pass rigid tests at the Lens Factory and at the ALPA Research Laboratory.

ALPA LENSES Will Fit On Alpa In Eveready Case

• 38mm f3.5	Old Delft Alfinar Coated	Cash 94.	9.40 Down
• 75mm f3.5	Schneider Xenar Coated	Cash 109.	10.90 Down
• 90mm f3.5	Schneider Tele Xenar Coated	Cash 124.	12.40 Down
• 135mm f3.2	Old Delft Algular Coated	Cash 139.	13.90 Down
• 180mm f4.5	Old Delft Alefar Coated	Cash 159.	15.90 Down
• 300mm f5.6	Tele-Kilar Coated	Cash 189.	19.90 Down

MINIFILM CAMERA CORP. 1190 SIXTH AVENUE NEW YORK 36, N. Y. CELEBRATE OUR 16th ANNIVERSARY SALE!

EVERYONE KNOWS
MINIFILM
IS...
F I R
A MINIFILM SENSATION!!
BRAND NEW LATEST 1955
PRAKTICA FX
Only 53.50
f2.9 Coated Praktica Lens Reg. 99.50
f1.9 Coated Primoplan Preset Lens 84.50
f2.8 Coated Tessar Preset Lens 78.95
f2 Coated Biotar Lens 99.95
Leather Eveready Case 8.50
Special Synchro Flash 7.95
Prism Finder 13.95
ANOTHER UNPRECEDENTED
MINIFILM VALUE
A Bonafide $70 Saving On The famous FUTURA 35mm Camera with f2.8 Schneider Xenar Lens. EXAMINE ITS NUMEROUS ADVANTAGES.
Reg. 129.50
Only 59.50
BRAND NEW
FUTURA P
EXCLUSIVE!!
An Ideal 35mm Color Camera
WITH AUTOMATIC FILM LEVER
AND FULLY GUARANTEED!
Brand New
32.50
COUPLED
Reg. 64.95 RANGEFINDER
COMBINATION SPECIAL:
Camera, Case, Flash
$39.95
Complete
SAVE $8.46
Brand New NORWOOD
FLASHRITE or SPEEDRITE METER
Simplifies flash photography, assures you perfect flash pictures every time.
NORWOOD FLASHRITE (For Flashbulbs) Reg. $11.95
NORWOOD SPEEDRITE (For Electronic Flash) Reg. $11.95
Only $3.49 Brand New
LATEST KODAK SIGNET
35mm CAMERA
ONLY 44.00
EXACTA VX SALE!!
SAVE MORE THAN $150
ON A BRAND NEW CAMERA
WITH SPLIT FIELD RANGE
FINDER PENTA PRISM
Spec. 199.50
Spec. 239.00
Spec. 249.00
Furnished with Factory Authorized Guarantee, Import Certificate and Owner's Registration.
NOVOFLEX
THE ONLY PRECISION COMPLETE ACCESSORY SYSTEM
BELLOWS ATTACHMENT
For Kine Exakta, Exa EBAL 34.50
For Praktica, Contax S Pentacon COBAL 34.50
For Leica, Contax, Etc. NOBAL 34.50
For Kine Exakta, Exa EDIG 59.50
For Practika, Contax S Pentacon COBIG 59.50
For Kine Exakta NOFEX 192.50
For Praktica, Contax S Pentacon NOFECO 192.50
For Leica, Contax, Etc. NOFEL 180.00
Leather Carrying Case for 400mm Lens FETAS 22.50
NOVOFLEX
REFLEX
HOUSING
WITH
PRISM OBSERVASCOPE
For Leica, Canon, Etc. NOPRI $140.00
For Leica M3 NOPRI-M $140.00
For Contax, Nikon, Etc. TAXPRI $184.00
For Leica NOSE $110.00
For Leica M3 NOSE-M $110.00
LEICA M3 ADAPTER
Use your 50mm or 90mm Leica
Lenses on the M3. Only $7.
COMBINATION CASE FOR REFLEX HOUSING
$26.95
$44.00
$64.50
$84.00
THE NEW EXCITING
REVERE 888 SLIDE
PROJECTOR
AT LAST . . . A COMPLETE NEW CONCEPT IN SLIDE PROJECTION . . . A PROJECTOR THAT REALLY OPERATES BY ITSELF! CHANGES UP TO 36 SLIDES AUTOMATICALLY!
Plus Other Unusual and Exclusive Features:
Selector for automatic, semi-automatic and manual operation
Built-in pointer
Rheostat Lite Control
Accommodates stereo slides
Vertical or horizontal adjustment
Complete with handsome, sturdy carrying case
119.50
Your old projector is worth up to $30 in trade, subject to inspection.
BUY A COMPLETE 8mm KODAK
MOVIE OUTFIT TO CAPTURE
YOUR VACATION PLEASURES!
PLUS
Both For 69.50 Used
THE FIRST ENGINEERED ALL-PURPOSE
TRIPOD WITH MANY EXCLUSIVE BUILT
IN FEATURES BELOW $100.00!!
Brand New Minifilm Special
15.95
17.95
TERRIFIC!!
BOLEX H16 CAMERA OUTFIT
Complete With 3 Lenses At A
WHOPPING LOW PRICE...
Automatic Threading
Built in Frame Counter
Single Sprockets for Sound
Forward or Reverse
Single Frame Exp.
8 to 64 F.P.S.
USED
LENSES:
15 mm f2.8 Wide Angle
25mm f1.9 Normal Angle
75mm f4.5 Telephoto
229.00
COMPLETE
INTERESTING NEW NOVOFLEX ACCESSORIES!
EVIS...
An optical viewfinder for all single lens reflex cameras... with field of view for normal and telephoto lenses.
Brilliant Viewing Under All Lighting Conditions
Vertical Picture Taking Made Easy
Facilitates Rapid Sequence Shots
EVIS $12.50
PANOR...
PANOR $11.00
CASTEL $18.50
TWIN LENS
REFLEX
Removal
Sale!
Low, Low Prices that will never be duplicated
Used . . . Like New . . .
Ciroflex B f3.5 Ctd
Ciroflex C f3.5 Ctd
Ciroflex D f3.5 Ctd Synch
Ciroflex E f3.5 Ctd Rap Synch
Ciroflex F f3.2 Ctd Rap Synch MX
Argoflex E f4.5
Rolleicord f3.5 Zeiss
Rolleiflex Standard f3.5 Zeiss
USED SLIDE PROJECTOR
PARADE
T.D.C. Mainliner 300W B.C.
Selectron
T.D.C. Headliner 300W B.C.
Selectron
LaBelle 55 500W B.C.
Automatic
GOLDE MANUMATIC 300W B.C.
UNBEATABLE SLIDE PROJECTOR
VALUE!
Minifilm Special 38.50
TREMENDOUS REDUCTIONS ON
POPULAR USED ANNIVERSARY
SPEED GRAPHIC OUTFITS!!
f4.5 Lens
Coupled Rangefinder
Focal Plane Shutter
(Speeds up to 1/1000 sec.)
With 3 Cut Film Holders
DON'T BE WITHOUT AN
EXPOSURE METER!
It Saves You Money!
It Assures You Perfect Exposure!
NORWOOD DIRECTOR
CLOSE-OUT
Brand New Prism
Eye Level Finder
EXAKTA V
EXAKTA VX • EXA
ONLY 29.95
Brand New
16th ANNIVERSARY GIFT FOR YOU! FREE COLOR FILM!
Roll of 35mm or 120-620 ANSCOCHROME COLOR FILM. Yours this month with all equipment purchased in the month of August.

MINIFILM CAMERA CORP. 1190 SIXTH AVENUE NEW YORK 36, N. Y. CELEBRATE OUR 16th ANNIVERSARY SALE!

SOT

FIRST IN VALUE! FIRST TO EXTEND TIME PAYMENTS ON NEW & USED EQUIPMENT! FIRST TO PUBLISH HIGHEST TRADE-IN ALLOWANCES! FIRST TO GIVE 30 DAY FREE TRIAL OFFERS! FIRST TO GUARANTEE FOR TWO YEARS!

LOOK TO MINIFILM FIRST . . . FOR ANY GOOD DEAL! MINIFILM SETS THE PACE— OFTEN IMITATED — NEVER SURPASSED!

10% DOWN 10% PER MONTH

NOW . . . A CHOICE OF TWO 16MM PATHE OUT FITS WITH FACTORY FITTED LENSES THAT MEET THE FULLEST* PROFESSIONAL STANDARDS

PATHE SUPER 16 STANDARD including
15mm f:2.8 Berthiot Cinor Wide Angle
25mm f:1.9 Berthiot Cinor Normal
75mm f:3.5 Berthiot Cinor Telephoto
PATHÉ BRAND NEW COMPLETE $592.00

PATHE SUPER 16 DELUXE including
10mm f:1.9 Berthiot Cinor Super Fast, Super Wide Angle
25mm f:1.5 Berthiot Cinor Super Speed Normal
75mm f:2.5 Berthiot Cinor High Speed Telephoto
. . . COMPLETE BRAND NEW $704.00

For Professional Movies Even Under Difficult Lighting Conditions
PATHE SUPER 16 ALSO OFFERS:
PATHE "SUPER 16" $450.00 less lenses

NEW ARGUS C3 OUTFIT SAVE 22.55
ALL BRAND NEW
SPECIAL! 79.95
Reg. $102.50
Only $7.99 Down
Camera W. F3.5 Ctd lens Flashgun—case (Reg. $46.50) Telephoto Lens 6—20 Exp. Rolls of B&W Film 3 Filters Sunshade & Filter Holder

PRISM BINOCULARS
FOR YOUR SPORTS PLEASURE!!
BASEBALL • BOATING • HORSE RACING
HIKING • HUNTING • BIRD WATCHING
Nationally Advertised and you can save more than 50% at MINIFILM.
These ZEISS Type Binoculars have COATED PRISMS, COATED LENSES, LIGHTWEIGHT DESIGN, MOISTURE PROOF CONSTRUCTION, 2 YEAR GUARANTEE, Brand New with case & Shoulder Strap.

6 x 15 IF	$11.75*	7 x 35 IF	$24.95*
6 x 30 IF	14.75*	7 x 35 CF	27.50*
7 x 35 CF	21.50*	7 x 50 IF	29.50*
		7 x 50 CF	29.50*
		8 x 30 IF	$20.50*
		8 x 30 CF	23.25*

*Subject to 10% Federal Excise Tax

Last Minute SPECIAL
Famous CONTAX III Camera with f:2 Zeiss Sonnar Lens, coupled rangefinder and built-in exposure meter.
When New $375.00
SPECIAL $99.50 Exc. Cond.

NOW . . . A FULLY AUTOMATIC EXAKTA IS YOURS EASILY . . . INEXPENSIVELY!

YOUR	f2.8 Auto. Westanar	f3 Auto. Westagon	f1.9 Auto Xenon	f3 Auto. Biotar
50mm f3.5 Tessar	Plus $40	Plus $60	Plus $95	Plus $95
50mm f2.8 Tessar	Plus $30	Plus $50	Plus $85	Plus $85
50mm f1.9 Primoplan	Plus $25	Plus $45	Plus $80	Plus $85
50mm f2 Xenon	Plus $30	Plus $55	Plus $85	Plus $90
50mm f2 Biotar	Plus $15	Plus $35	Plus $69	Plus $75

BRAND NEW Latest 1955 AUTOMATIC PENTACON
• Fully Automatic Diaphragm
• Prismascope • MX Flash
• 1 Sec. to 1/1000
With 12.0 Ctd. Westanar Automatic Lens
Reg. $49.50 Special 139.95
With 12 Ctd Lens Reg. 230.50 Special 149.50
Everready Case Reg. 15.00 Special 9.75

1. INTERCHANGEABLE LENSES!
2. SINGLE WINDOW COUPLED RANGEFINDER & VIEWER!
3. RAPID TRANSPORT LEVER!

Feature for feature . . . dollar for dollar . . . it can't be beat!

35mm LORDOMAT
The 1955 camera sensation from Wetzlar, Germany.
ONLY $89.50 $8.95 DOWN
WITH F2.8 CTD. LORDON LENS, CLICK STOPS.

- Deluxe Leather Eveready Case 8.95
- Patented Taco Color Flashgun 7.95
- 35mm f3.5 Lordonar wide angle Lens, click stops 25.00
- 90mm f4.5 Telorom Telephoto Lens, click stops 64.50
- COMBINATION VIEWFINDER 12.50
- OMNICA COMBINATION CASE 40.00
- Film Speed Indicator
- Click Stop Lenses.
- Double Exposure Prevention
- Positive Automatic Lens Coupling System
- Detachable Back for Easier Loading
- Die Cast Aluminum Body
- Shutter Speeds from 1 sec. to 1/500 of a sec.
- Built in Self Timer
- Adjustable MX Flash Synchronization
- Built in Orange Filter for Easier Focusing

1-ZOOM!!!
MINIFILMS FINEST VALUE YET !!
Pan Cinor f2.8 ZOOM LENS
For all 16mm Cameras, With FINDER
reg. 472.50
BRAND NEW DISC MODEL MINIFILM SPECIAL
199.50
Uninterrupted Focus from 20mm to 60mm with turn of a Lever

Leica is first again . . .
A COMPLETELY NEW LEICA!
M3 With Sensational New Automatic Features
• COUPLED RANGEFINDER & VIEWFINDER
• Viewfinder adjusts auto for all lenses
• Uses Patented Quick-Change Bit.
• Full M-X Synch
• Rapid Wind Lever
• Delay Action Mechanism
• All Speeds On One Knob
• Open Hinged Back

LEICA M3 f3.5 Elmar M	348.00
LEICA M3 f2 Summicron M	447.00
35mm Summaron f3.5M W.A.	98.50
50mm Elmar M Tele	93.00
135mm Hektor f4.5M Tele	141.00

SAVE ON PLASTIC HI-FI RECORDING TAPE!
5" REEL (600 ft.) Reg. $3.50
MiniFilm Special $1.39 3 for $4.95
7" REEL (1200 ft.) Reg. $5.50
MiniFilm Special $1.89 3 for $5.40
USED POPULAR TAPE RECORDERS AT TREMENDOUS SAVINGS

	Reg.	Our Price
Amare Celebrity 3½	$229.95	$139.50
Federal FM2 3½, 7½	139.50	86.00
Revere T100 3½	169.50	74.50
Revere T1100 3½, 7½	159.50	94.50
TDC Stereotape 3½, 7½	269.50	158.50

PRECISION WALZ "CUSTOM FITTING" FILTERS
INDIVIDUALLY MOUNTED—SCREW DIRECTLY INTO YOUR CAMERA LIFETIME GUARANTEE!

For The Following Cameras:	Individual Filters	B&W for Color or Black & White Films	Lens Hood
Argus C-3 or Elmar f:3.5	1.50	0.70	1.50
Kodak Retina, Signet, Rentam, R.F., Contaflex, Contessa	2.00	0.70	2.00
Leica, Summitar f:2, Summicron F:2, Contax Sonnar f:2 & f:1.5 Exakta, Pentacon or Prakticar, with Zeiss Tessar f:2.8 & f:3.5 P.S., Nikon f:2, Retina f:3.5	2.95	11.70	3.00
Series V	2.40		
Series VI	2.00		

Colors Available: Daylight Filter for Type A Films (@40), Skylight, Flash (@810), Yellow (K2), Red (25A), Green (X1), Color X1 Special: Type A, Skylight & Flash Filters. Black and White IR Contrast: Yellow, Red & Green Filters.
Walz Lens Hoods screw into camera or Walz filter. All Walz Filters and Lens Hoods are screw-in type except Rollei, which are bayonet type.
Please specify your camera and lens and colors desired when ordering.

MINIFILM'S OWN ELECTRONIC FLASH MINILITE
A compact, portable, power-packed unit at a sensational low price.
YOUR FLASH PICTURES IN COLOR CAN COST YOU LESS THAN 1c PER FLASH.
BRAND NEW ONLY 39.50
Batteries $5.95
Fast Color Guide @50 . . . Fast Pan Guide @250

USED POPULAR FLASH UNITS

FR—Reg. $54.95	$36.50
Mighty Light Port. AC—Reg. $80.50	$48.50
Heiland VI Port.—Reg. $138.00	$74.50

For the First Time!
A Complete 8mm Turret Camera Outfit With Full Complement of Lenses At Give-Away Prices . . . ACT NOW

	Wide Angle	Telephoto	USED SPECIALS
		1½" f3.5	$ 67.50
Revere CA7 f2.8		1½" f3.5	$ 82.50
Bolex B8 f2.5	7mm f2.5	1½" f3.5	$ 92.50
Keystone K35 f2.5	7mm f2.5	1½" f3.5	$ 97.50
Revere 99 f1.9	7mm f2.5	1½" f3.5	$109.50
Revere 84 f1.9	7mm f2.5	1½" f3.5	$122.50
Revere 44 f1.9	7mm f2.5	1½" f3.5	$127.50
B&H 134 TA f1.9		1½" f3.5	$137.50
B&H 172 A f1.9	7mm f2.5	1½" f3.5	$127.50
DeJur Fadematic f1.9	7mm f2.5	1½" f3.5	$189.50
Bolex H8 Leader f1.9			

VISTASCOPE
FOR BREATH-TAKING CINEMASCOPE TYPE MOVIES IN YOUR OWN HOME WITH YOUR OWN CAMERA AND PROJECTOR! Eliminates Need for Panning
50% More Film Economy
50% Wider Area Coverage
Vistascope Lens For 8mm Camera and Projector ..... $75.00 only $7.50 down
For 16mm camera and Projector ..... $135.00 only $12.50 down
SPECIAL—Can also be used with your still camera for novel wide screen projection.

MINIFILM CAMERA CORP.
1190 Avenue of the Americas (bet. 46-47 St.) New York 36 • JU 2-1416
. . . Where Customers Become Friends . . .

Please rush me the following equipment ..... Price .....
Enclosed is balance due .....
Ship Equipt. C.O.D. (10% down required) .....
Name .....
Address .....
City ..... Zone ..... State .....
Please send TIME PAYMENT & information.

16th ANNIVERSARY GIFT FOR YOU! FREE COLOR FILM! Roll of 35mm or 120 620 ANSCOCHROME COLOR FILM. Yours this month with all equipment purchased in the month of August

MINIFILM

the world's largest clearing house for USED CAMERAS! AND HERE'S WHY...

Because of our huge volume and fast turnover we can pay you TOP DOLLAR . . . just look at these generous allowances.

10% DOWN

WE PAID!!

D. Mc OF KINGSTON, PA.
. . . FOR ROLLEICORD III — 100.00

R. P. OF FT. LEE, VA.
. . . FOR POLAROID CAMERA — 46.00

REV. H. G. W. OF BON AIR, VA.
. . . FOR AURICON CINE VOICE — 423.00

YOU TOO CAN GET TOP DOLLAR—WRITE TODAY!

Lenses for LEICA, CANON, CONTAX, NIKON

	New	Used	Trade-in
28mm f3.5 Serenarg W.A.	$134.00	$ 79.50	$ 55.00
28mm f3.5 Nikkor c W.A.	149.50	97.50	70.00
35mm f2.8 Biogon W.A.c	183.00	126.95	100.00
35mm f3.5 Nikkorg W.A.	97.50	57.00	40.00
35mm f3.2 Serenarg W.A.	94.00	69.50	45.00
35mm f3.5 Summarong W.A.	96.00	57.25	40.00
50mm f3.5 Elmarg	57.00	34.00	25.00
50mm f1.4 Nikkorg	199.50	118.00	80.00
50mm f1.5 Sonnarg	175.00	98.00	70.00
50mm f2 Summitar	88.00	62.95	40.00
50mm f2 Summicronc	156.00	106.00	75.00
50mm f1.5 Summarilg	177.00	109.95	80.00
85mm f1.5 Lithogon c	199.50		95.00
85mm f2 Nikkorg	179.50	89.00	70.00
85mm f1.5 Serenarg	238.00	137.50	110.00
85mm f2 Sonnarg Tele	229.00	99.50	75.00
85mm f1.5 Summaronc	360.00	179.00	140.00
90mm f4 Elmarg	90.00	58.00	40.00
100mm f4 Serenarg	87.00	49.00	35.00
105mm f2.5 Nikkor c	152.50	104.00	75.00
105mm f2.5 Nikkor c	152.50		75.00
125mm f2.5 Hektor c	147.00	96.50	70.00
135mm f4.5 Leitz Hektor Bilt		63.95	40.00
135mm f3.5 Nikkorg	145.00	85.00	62.00
135mm f4 Serenar c	108.00	69.00	50.00
135mm f4 Sonnar c	146.00	88.00	65.00
200mm f4.5 Telyt c	156.00	104.00	75.00
300mm f5.6 Kilar c	149.95	97.50	70.00
400mm f5.6 Novoflex c	118.50		85.00

Lenses for EXAKTA, CONTAX D, PRAKTICA, PENTACON

	New	Used	Trade-in
28mm f3.5 Angenieux c	$120.00	$ 73.95	$ 60.00
35mm f2.5 Angenieux c	99.50	56.95	45.00
40mm f3.5 Cassaron c	49.50	31.00	20.00
40mm f2.5 Makro-Kilar Model D c	114.95	78.50	60.00
50mm f2.8 Westanar Auto Disc	69.50	44.50	30.00
50mm f1.9 Xenon Auto	169.50	119.00	85.00
58mm f2 Biotar c		49.00	30.00
50mm f2 Biotar preset c	125.00	63.95	45.00
75mm f1.5 Biotar c	216.50	93.95	70.00
85mm f1.5 Lithogon c	179.50		85.00
90mm f2.5 Angenieux c	94.50	58.50	40.00
90mm f1.8 Angenieux c	149.50	95.95	75.00
90mm f4 Sun c	51.95	24.50	18.00
90mm f4 Sun preset c	64.95	33.50	25.00
135mm f3.5 Angenieux c	89.50	54.50	30.00
135mm f4.5 Steinheil c	60.00	37.00	22.00
135mm f3.8 Sun c	59.50	29.50	20.00
135mm f3.5 Sun preset c	74.95	36.50	25.00
135mm f3.5 Tele Colmar preset c	84.95	44.00	30.00
135mm f4.5 Tele Xenar c	84.95	49.50	35.00
150 mm f5.5 Tele Xenar c	64.95	39.50	30.00
240mm f5.5 Tele Xenar c	115.75	78.00	55.00
360mm f5.5 Schneider Tele Xenarg	169.95	98.00	75.00
400mm f5.5 Tele Magor	134.50	97.50	75.00
400mm f5.6 Novoflex c	189.50		85.00
400mm f5.5 Tele Magorg. Preset	199.50	137.50	100.00

ACCES. FOR IMPORTED CAMERAS

	New	Used	Trade-in
Leitz Adapter for Leica M3	$ 10.50		
Leitz Focaslide	36.00	$23.00	$15.00
Leitz Imarect Finder	39.00	24.00	16.00
Leitz B.C. Flashgun	24.00	16.95	12.00
Leitz Mirror Reflex Housing	102.00	69.00	50.00
Zeiss Revelv. Univ. Finder	80.00	42.75	30.00
Zeiss Contaretor Close-Up	81.00	43.00	30.00
Novoflex Bellows for Leica, Contax	34.50		15.00
Novoflex for Exakta, Pentacon, etc.	34.50		15.00
Novoflex Reflex Housing for Leica-Contax	145.00		75.00
Novoflex tripod and Stereo Rackover	18.50		12.00
Novoflex Universal Panoramic attach	11.50		

LEICA CONTAX NIKON CANON

	New	Used	Trade-in
Canon IV S.2 f1.8 Serenarg*	$204.00	$144.00	$120.00
Contax I f2.8 Tessar		46.00	25.00
Contax I f2 Sonnar		59.00	35.00
Contax II f2 Sonnar		83.95	65.00
Contax III f2 Sonnar		109.00	80.00
Contax IIA f2 Sonnar c*	345.00	167.00	125.00
Contax IIA f1.5 Sonnar c*	374.00	189.50	145.00
Contax IIIA f2 Sonnar c*	383.00	194.50	150.00
Contax IIIA f1.5 Sonnar c*	412.00	196.00	196.00
Leica IIIA f2 Summar		84.50	65.00
Leica IIIC f3.5 Elmar c		92.00	70.00
Leica IIIC f2 Summitar c		124.00	100.00
Leica IIIF f3.5 Elmar c*	237.00	152.00	120.00
Leica IIIF f2 Summitar c*	268.50	147.50	125.00
Leica IIIF f2 Summicron c*	336.00	183.00	155.00
Leica IIIF f1.5 Summarit c*	357.00	196.95	175.00
Leica M3 f2 Summicron c*	447.00		220.00
Leica M3 f1.5 Summarit c*	468.00		230.00
Nikon S2 f2 Nikkor c			150.00
Nikon S2 f1.4 Nikkor c*	345.00		170.00
Nikon F2 Nikkor c*	269.00	154.00	105.00
Nikon F1.4 Nikkor c*	299.95	167.50	125.00

DO IT YOURSELF AND SAVE!

DEVELOP AND MOUNT YOUR OWN EKTACHROME

Kit E1—Develops 6 rolls 120/620 — $1.05
Kit E2—1 Qt. develops 6 rolls, 20 Exp. 35mm. — 1.80
Kit E2—½ Gal. develops 24 rolls, 20 Exp. 35mm. — 4.80

ANSCO or ANSCOCHROME DEVELOPING KITS

Developer for 4 Rolls — $1.95
Developer for 8 Rolls — 2.95
Developer for 32 Rolls — 7.25
2x2 Cardboard Mounts — 25¢ per Dozen

SHOOT ANSCOCHROME AT A.S.A. 125

WHEN YOU DEVELOP WITH OUR SPECIAL HIGH-SPEED KITS

4 Rolls 20 Exp. ANSCOCHROME — all for
Developer for 4 Rolls — $8.75
80 Cardboard Mounts

8 Rolls 20 Exp. plus Developer & 160 Mounts — $13.95

28 ft. 35mm ANCOCHROME—including a Daylight Bulk Film Loader—8 cartridges—8 mailing bags—Developing & Printing (Tongued for 8-20 exp. rolls, frame numbered). **All for $14.75**

28 ft. 35mm EKTACHROME—with 8 free cartridges, 8 mailing bags—including Developing & Printing (Frame numbered). **All for $16.75**

35MM SINGLE LENS REFLEX

	New	Used	Trade-in
Alpa 7 f1.8 Switarg*	$459.00		$200.00
Contaflex f2.8 Tessar Auto R.F.	169.00	86.50	70.00
Exa f2.8 Westar MXg	85.00	45.95	35.00
Kine Exakta f3.5 Tessar c*		72.50	50.00
Exakta VX f2 Automatic Biotar R.F. c	382.00	224.00	180.00
Exakta V f2 Biotar MX		119.00	100.00
Exakta VX f2.8 Auto Westanar	239.50	156.00	125.00
Exakta VX f1.9 Auto Xenon	341.70	197.00	155.00
Exakta VX f2. Auto Westagon	279.50	169.00	140.00
Contaflex II f2.8 Tessar Auto R.F. c meter	199.00	129.00	95.00
Contax D f2 Biotar P.S.c*	199.00	119.00	80.00
Pentacon f2 Biotar pre-set*	249.50	129.00	100.00
Praktica FX f2.8 Westar MXg	99.50	42.50	30.00
Praktica FX f2 Biotar P.S.MX	169.50	84.00	65.00
Praktiflex f2 Biotar c	89.00	69.00	45.00

35MM CAMERAS

	New	Used	Trade-in
Argus C-3 RF case and flash	$ 66.50	$ 32.00	$ 28.00
Argus C4 f2.8 RF MX	84.50	46.00	35.00
B&H Foton f2 RF MX	498.00	265.00	200.00
Boiosy Jubilee f2.8 Setomatic R.F. Case and flash	79.50		40.00
Boiosy B22 f3.2 RF c*	69.50	35.50	30.00
Boiosy C f3.2 Reflex RF c*	89.50	38.95	30.00
Kodak Bantam R.F. f3.9 c	56.75	39.50	30.00
Clarus f2.8 RFc*		37.50	20.00
Contessa f2.8 RF meter MXc*		85.95	60.00
Kodak 35 f3.5 R.F.		29.95	20.00
Kodak Retina IIC f2.8 R.F. c	135.00	105.00	65.00
Kodak Retina IIIC f2 R.F. c	185.00	117.00	85.00
Kodak Pony 828 f4.5 C*	29.50	17.00	12.00
Kodak Pony 135 f4.5 C*	29.75	18.00	12.00
Graphic 35 f3.5 R.F. Case & Flash	89.50		45.00
Retina II f2 Xenon RF		59.00	40.00
Kodak Retina IIA RF MXg		71.50	60.00
Kodak Signet f3.5 Ektar RFC*	70.00	44.00	35.00
Minox IIIS chsn & case*	139.50	85.00	60.00
Minox II f3.5c		49.50	30.00
Mercury II f2.7c*	41.50	18.95	12.00
Robot Royal f1.9 Xenon R. F.	295.00	168.50	135.00
Robot II f2 Biotar Rap Seq		54.00	30.00
Robot IIA f1.9 Xenon Rap Seq.c*	89.50	57.00	40.00
Robot Star f1.9 Xenon Rap Seq.c*	127.50	79.50	55.00
Voigt Prominent f2 RF MXg	220.00	131.50	100.00
Voigt Prominent f1.5 RF MXg	270.00	136.95	105.00
Voigt Vitessa f2 RF MXg	127.50	84.00	55.00
Voigt Vito II f3.5c*	54.50	29.50	22.00
Voigt Vito III f2 RF MX*	119.50	79.50	55.00
Voigt Vitessa L f2 R.F. MX	159.50	107.50	75.00
Voigt Vito B	54.50	34.00	25.00

35MM STEREO CAMERAS

	New	Used	Trade-in
Kodak f3.5c*	$ 84.50	$ 50.95	$35.00
Revere f3.5 RFc*	174.50	76.00	60.00
Realist 45 f3.5 c	88.50		40.00
Stereo Realist f3.5 RFc*	159.00	66.50	55.00
Stereo Realist f2.8 RFc*	192.50	119.00	95.00

2¼x2¼ REFLEX CAMERAS

	New	Used	Trade-in
Ciroflex D f3.5c	$ 75.00	$ 47.00	$ 25.00
Ciroflex E f3.5/400c*	99.50	58.00	35.00
Ciroflex F f3.2 MXg		67.50	45.00
Graflex 22 f3.5 C*	93.00	47.00	35.00
Hasselblad Super Wide Angle f4.5	489.50	369.50	270.00
Hasselblad f2.8 Ektar /1000 C*	379.50	208.00	175.00
Ikoflex IIA Auto f3.5 Tessar MXg*	126.00	74.95	60.00
Kodak Reflex I f3.5c*		36.95	25.00
Kodak Reflex II f3.5c*		57.50	40.00
Ricohflex VI f3.5c*	44.95	22.00	15.00
Rolleicord V f3.5 Xenar MX c	134.55	99.50	70.00
Rolleicord III f3.5 Xenarg*		67.50	45.00
Rolleicord IV f3.5 Xenar MXg		66.95	55.00

EKTACHROME (35mm 20 exp.)

3 times as fast as Kodachrome

1 Roll (Daylight or Indoor) — 1.85
Developing and Mounting — 1.25

ORIGINAL KODAK FACTORY PACKAGE
Reg. Price — 3.10
Our Price — 2.85
3 Rolls for — 7.50

ANSCOCHROME

35mm — 20 Exp. FACTORY PACKED
1 Roll $2.75 — 3 Rolls $7.25
Price includes Dev. & Mtg.

120-620 ANSCOCHROME

1 Roll — $1.95 — 3 Rolls — $5.50
Size 828—3 Rolls — $4.75

35mm EKTACHROME ANSCOCHROME RELOADS

These Reload Cartridges are Laboratory packed and Quality Controlled by MINI-FILM in its own Air Conditioned Darkrooms. Twenty and 36 Exposure Cartridges are manufactured daily from 100 ft. rolls received fresh from Eastman Kodak and Ansco. Careful supervision and tremendous sales turn-over insures your getting reloads which are equal in quality and freshness to cartridges packed at the factory. THE ONLY THING DIFFERENT IS THE PRICE. Take a tip from film-wise professionals . . . USE MINIFILM 1956 DATED RELOADS, Daylight or Indoor.

ANSCO CHROME	Daylight or Indoor		EKTACHROME	Daylight or Indoor	
20 Exp.		36 Exp.	20 Exp.		36 Exp.
1 Roll...2.50		1 Roll...3.75	1 Roll...2.50		1 Roll...3.85
3 for...6.50		2 for...6.95	3 for...6.95		2 for...7.35

ALL PRICES ABOVE INCLUDE DEVELOPING AND MOUNTING

PLEASE INCLUDE 20¢ EXTRA FOR POSTAGE ON ALL FILM ORDERS

KODACHROME

35mm 20 Exp. Factory-Packed Daylight or Type A
3 Rolls 5.55—6 Rolls 10.50

KODAK'S MIRACLE TRI-X

35mm 20 Exp. 6 Rolls $1.99—10 for $3
36 Exp. 4 Rolls $1.99—7 for $3.15
50 feet $2.45 100 feet $3.95

SALE! SALE! #535

35mm — 20 Exp. — ANSCO COLOR
1956 DATED — FRAME NUMBERED

Prices Below Include Developing And Custom Mounting	Prices Below Without Developing
1 Roll 1.85	1 Roll 1.15
3 Rolls..... 4.85	3 Rolls..... 2.95
6 Rolls..... 9.50	6 Rolls..... 5.25
10 Rolls..... 14.95	10 Rolls..... 8.29

#535 28 FT. BULK ANSCO COLOR
TONGUED — FRAME NUMBERED
SEALED CANS — 1956 DATED

Prices Below Include Developing And Printing As Ready	Prices Below Without Developing
1 Can 11.95	1 Can 6.75
2 Cans 22.75	3 Cans..... 18.25
3 Cans 33.00	5 Cans..... 28.50

8 Free Cartridges Per Each Can
Enclose Postage — 10¢ per can.

16th ANNIVERSARY GIFT FOR YOU! FREE COLOR FILM! Roll of 35mm or 120-620 ANSCOCHROME COLOR FILM. Yours this month with all equipment purchased in the month of August.

16th ANNIVERSARY GIFT FOR YOU! FREE COLOR FILM! Roll of 35mm or 120/620 ANSCOCHROME COLOR FILM. Yours this month with all equipment purchased in the month of August

10% MONTHLY — 30 DAY FREE TRIAL — 2 YEAR SERVICE GUARANTEE

MINIFILM'S EXCLUSIVE "PUBLISHED TRADE-IN ALLOWANCES"
are the HIGHEST OFFERED ANYWHERE!
To get the right deal, HERE'S ALL YOU HAVE TO DO

1. Select the equipment of your choice at the prices shown in column one for new equipment or column two for used equipment.

2. If you have equipment to trade, check if it is represented in listing and deduct the allowance shown for it in column three.

3. Rush your order (and trade-in equipment if you have such) plus your remittance to cover—or instructions to ship C.O.D. for the balance or deferred payment terms as per your instructions.

MINIFILM will immediately forward the equipment you desire. Of course your order will be fully insured. OUR FAMOUS 30 DAY MONEY BACK GUARANTEE AND 2 YEAR SERVICE GUARANTEE ASSURES YOU OF COMPLETE SATISFACTION.

	New	Used	Trade-in
Auto Rollei f3.5 Tessar		88.95	65.00
Auto Rollei IIB f3.5 Xenar¢*		98.50	75.00
Auto Rollei IIB f3.5 Tessar¢*		107.50	85.00
Auto Rollei IIB f2.8 Tessar¢*		149.50	100.00
Auto Rollei III f3.5 Xenar MX¢	217.50	116.95	100.00
Auto Rollei III f3.5 Tessar MX¢*	232.50	126.95	110.00
Tele Koniflex II f3.5 Normal plus 135mm f4.5 Telephoto	289.50		150.00
Auto Rollei 2.8C f2.8 Xenotar MX¢	291.50	183.50	150.00

ROLL FILM CAMERAS

	New	Used	Trade-in
Kodak Chevron f3.5 RF 800 MX	$198.50	$129.50	$100.00
Kodak Medalist I f3.5 Ektar		56.00	40.00
Kodak Medalist II f3.5 Ektar 4*		111.50	75.00
Omega 120 f3.5 Omicron R.F. MX	239.50		130.00
Polaroid Highlander	69.95	42.50	30.00
Polaroid Land¢*	89.75	39.00	30.00
Polaroid Pathfinder f4.5 RF	249.50	148.95	120.00
Super Ikonta B f2.8 Tessar RF ¢*	139.00	87.50	65.00
Super Ikonta BX f2.8 Tessar RF¢*	163.00	102.00	75.00
Super Ikonta C f3.5 Tessar RF¢*	114.00	59.00	45.00
Super Ikonta III f3.5 Tessar R.F. MX	120.00	77.50	55.00
Voigt Bessa II f3.5 RF MX¢	124.50	68.95	50.00

PRESS CAMERAS

	New	Used	Trade-in
23 Ann. Graphic RF f4.5 lens		$83.95	$55.00
45 Ann. Graphic RF f4.7 lens		96.00	75.00
2x3 Linhof Super Tech RF 3-lenses comp.	$569.00	338.00	280.00
2¼x3¼ Bertram f3.5 Xenar Multifocus R.F.	495.00	339.50	240.00
4x5 Linhof Super Tech RF f4.5 MX	389.75	207.00	165.00
2¼x3¼ Pacemaker Speed f4.5 KRF¢*	313.95	147.59	120.00
3¼x4¼ Pacemaker Crown f4.7 KRF¢*	267.45	139.00	100.00
4x5 Pacemaker Speed f4.7 KRF¢*	315.45	172.50	130.00
4x5 1955 Pace Crown f4.7 Multifocus R.F.	287.50		150.00
4x5 B&J Press f4.7 Kalart R.F.	197.50	89.50	60.00

SLIDE PROJECTORS

*Blower cooled	New	Used	Trade-in
Argus Automatic 300W* Case	$66.50	$43.50	$30.00
Argus PB 300, case*	48.50	26.00	20.00
GoldE Manumatic 300 W.*	58.50	26.00	20.00
GoldE Coronet 300 W, case*	44.75	22.00	15.00
Kodaslide Merit 150 W	26.10	16.50	10.00
Kodaslide Signet 300W*	59.50		30.00
Kodaslide Signet 500 W*	72.50	49.00	35.00
Kodaslide Table Viewer 4x		27.00	20.00
LaBelle 22 Automatic 200 W *	69.00	46.50	35.00
LaBelle 55 Automatic 500 W *	95.00	54.00	40.00
LaBelle Director 300W Auto*	59.50		30.00
Nord Stereo 300 W*	99.50	69.00	50.00
Revere 555 500W Auto Case *	79.50		40.00
Revere 888 500W Auto Remote Case	119.50		60.00
Revere 444 300 W*	69.50	31.00	22.00
SVE Instructor 300 W slide & strip *	89.50	57.50	40.00
TDC Headliner 300W Semimatic *	49.99	28.50	20.00
TDC Mainliner 300W Semimatic*	59.50	30.95	25.00
TDC Model D 300W Semimatic*	67.50	35.50	28.00
TDC Duo 300W 2¼ *	67.50	35.00	28.00
TDC Duo 500W 2¼ *	84.50	52.50	40.00
TDC Project-or-View 200W*	77.50	48.00	35.00
TDC Stereo Projector 500W*	169.50	98.50	75.00
TDC Stereo Projector View 300W*	144.50	96.50	70.00
Viewlex V33L 300W Auto*	67.00	39.95	30.00
Viewlex V35L 500W*	79.95	47.50	35.00

8MM CAMERAS

	New	Used	Trade-in
B&H 134V f2.5¢	$89.95	$40.00	$30.00
B&H 172 B f1.9 Mag. ¢	164.95	101.00	80.00
Bolex C 8 f2.8 Yvar¢	89.50		40.00
B & H 252 f2.3 Monterey¢	59.95	39.00	28.00
Bolex B8 f2.8 Yvar Tur¢	119.50	69.00	55.00
Bolex H8 Leader f1.9 Tur¢	259.50	144.95	115.00
Bolex 8mm Pancinor f2.8¢	219.50	144.00	110.00
Kodak Brownie f2.7¢	37.50	21.95	15.00
Cine Kodak Magazine f1.9¢	149.50	82.00	60.00
De Jur Citation f2.5¢	77.50	38.00	30.00
De Jur Fadematic f1.9¢	149.50	93.00	65.00
Keystone K-30 Capri f2.8¢	54.95	34.50	25.00
Keystone K-32 Olympic f2.5¢	79.95	46.00	30.00
Keystone Bel Air f2.5 Mag¢	89.50	52.00	35.00
Revere 50 f2.8¢	49.50	24.00	18.00
Revere 88 f2.5¢	74.00	33.50	25.00
Revere 80 f2.5¢	97.50	44.00	35.00
Revere 84 f1.9 Tur¢	147.50	84.00	70.00
Revere 67 f2.8 Mag Tur¢	119.50	59.50	40.00
Revere 40 f2.5 Mag¢	99.50	53.00	40.00
Revere 44 f1.9. Mag Tur¢	154.50	93.50	65.00
Revere B61 f19 Mag¢	137.50	81.50	60.00
Revere B63 f25 Mag Tur¢	142.50	84.00	58.00
Vistascope Outfit, Case	75.00		40.00
Zoomar 8 f2.8 Lens	199.00		110.00

8MM PROJECTORS

	New	Used	Trade-in
Ampro Futurist 750W case	$149.95	$88.50	$60.00
B&H Monterey 500 W Case	99.50	49.95	35.00
B&H Regent 500 W Case	179.95	104.00	80.00
Bolex M-500 W Case	169.50	114.00	85.00
De Jur 750 W Case	159.50	84.00	65.00
De Jur 1000 W Cordomatic Case	177.50	105.00	88.00
Keystone K70C Brightbeam 500 W Case	79.95	57.00	
Keystone K109 750 W Splicer Case	159.50	88.00	65.00
Keystone K100 500W Case	99.95	69.00	50.00
Keystone K95 M 750W Case	127.95	84.00	65.00
Keystone K109M 750W Case	167.50	94.00	75.00
Kodak Brownie 300 W Case	62.00	39.50	30.00
Kodascope 8-71A 1000 W	110.00	72.50	50.00
Revere 777 750W Case	127.50		60.00
Revere 85 500 W	114.50	59.25	45.00
Revere 90 750 W	125.00	67.00	50.00

MINIFILM COLOR LABORATORIES

SPARKLING COLOR PRINTS

2x3¼ —Usually 35c —Our Price 25c ea.
2½x3¼—Usually 54c —Our Price 25c ea.
3¼x4 —Usually 75c —Our Price 47c ea.
4x5 —Usually 1.00—Our Price 57c ea.
5x7 —Usually 1.50—Our Price 89c ea.
8x10 —Usually 3.00—Our Price 1.85 ea.

24 HR. COLOR FILM DEVELOPING

35mm Ansco mounted. $1.00—3 for $2.70
35mm Ektachrome. $1.25—3 for $3.25
120/620 Ektachrome or Ansco—$1 per roll

SLIDE DUPLICATES
5 FOR 1.00—25 FOR 4.00

LOAD YOUR OWN 35mm ANSCO CHROME
(SO QUICK — SO EASY — SO ECONOMICAL)
A CHILD CAN LOAD A ROLL IN 90 SECONDS!
A 20-EXP. ROLL COSTS ONLY **$1.11**

1. A Daylight Bulk Film Loader
2. 28 ft. of Ansco Chrome—enough for 8 rolls (tongued—frame numbered—1956 date)
3. 8 Brand new casettes. 4. 8 Mailing bags.

ALL FOR ONLY 8.88

ELECTRONIC FLASH

	New	Used	Trade-in
Ge Be I Portable	69.95	29.50	20.00
Dormitzer DB 1 Portable	109.50	49.50	30.00
Dormitzer 207 Battery & Charger	140.00	79.00	50.00
Heiland III AC, Portable	197.50	97.50	50.00
Heiland IV	369.50	209.00	130.00
Heiland V	119.50	69.00	45.00
Mighty Lite AC	49.50	35.00	20.00
Mighty Lite Port.	69.50	49.00	30.00
Strobo II flash, Port.	115.00	69.00	40.00
Strobo III flash, Port.	159.95	109.50	70.00
Sunlite II model 225. Port.	79.50	49.50	35.00
Sunlite II model 110 AC	62.50	39.50	25.00
Sunlite II Pocket Pak Port.	89.50	57.50	35.00
Sunlite flash saver AC	39.95	24.50	15.00
Ultrablitz Expert IIM Port. AC	Special 49.50		
Dormitzer 208B Port. w/charger		180.00	75.00
Dormitzer 200B Port. w/charger		275.00	125.00
Limelite 60 Port.		99.50	45.00
Sunlite "500" Port.		49.50	20.00
Sunlite III Port. AC		139.50	55.00
Heiland VI Port.		141.60	60.00
Heiland VII Pro-Pak Port.		55.95	30.00
De Jur Port.		39.95	20.00
Leitz Braun-Hobby Port.		89.95	
FR Port.		54.95	25.00

TAPE RECORDERS

2 speed ... 3¾ and 7½ Inches per second
7½ ... 7½ Inches per second
3¾ ... 3¾ Inches per second
1⅞ ... 1⅞ Inches per second
TR ... Tape Recorder and Radio

	New	Used	Trade-in
Ampro 731R 3¾ 7" Reel		$49.00	$25.00
Ampro Hi-Fi 2 Speed 7" Reel	239.95	139.50	105.00
Federal FME 2 speed 7" Reel	139.50	86.00	60.00
Pentron 9T-3C 2 speed 7" Reel	189.50	99.50	85.00
Pentron HT-225 s speed 7" Reel	225.00	132.50	105.00
RCA 402 2 Speed Remote Control	229.95	159.00	110.00
RCA SRT301 2 speed 7" Reel		99.50	70.00
Revere T100 3¾ 5" Reel	169.50	74.50	50.00

16MM CAMERAS

	New	Used	Trade-in
Auricon Cine Voice f1.9¢	$749.00	$538.00	$350.00
Arriflex 16 (complete 3 lenses)	1990.00	1300.00	1000.00
Bell and Howell Automaster Mag. Tur f1.9		129.00	100.00
B&H 200 f2.5 Mag¢	174.95	108.00	85.00
B&H 200T f1.9 Mag Tur¢	244.95	157.00	125.00
B&H 70DA f1.9 Tur		149.00	110.00
B&H 70 DL f1.9 Tur¢	365.50	218.00	175.00
Bolex Stereo		145.00	75.00
Bolex H16 Leader f1.9 Tur¢	269.50	149.00	120.00
Bolex H16 Leader (3 lenses compl)¢	399.45	229.95	180.00
Bolex H-16 De Luxe f1.4 Tur Octameter¢	486.00	295.00	225.00
Bolex Pan Cinor f2.8 case¢	349.50	199.00	165.00
Cine Kodak K100 f1.9	269.00		130.00
Cine Kodak Mag. f1.9		57.00	45.00
Cine Kodak Royal Mag. f1.9¢	169.50	104.50	80.00
Cine Kodak Special II f1.9¢ Tur	990.00	590.00	400.00
Keystone A15 Newport f1.9 Turret	199.50		100.00
Elgeet Stereo Outfit Complete Spec.	89.50	69.50	50.00
Keystone A-9 f2.5¢	99.50	57.50	40.00
Keystone A12 f1.9 Tur¢	159.50	97.00	70.00
Keystone K50 f2.5 Mag¢	129.50	82.50	60.00
Keystone K55 f1.9 Mag Tur¢	175.00	117.00	80.00
Pathe Super 16 Tur¢	450.00	229.00	180.00
Revere 16 f1.9 Mag¢	182.50	87.00	60.00
Revere 26 f1.9 Mag Tur¢	212.00	105.00	70.00
Revere C101 f2.5	139.50		70.00
Revere C103 f1.9 Turret	194.50		95.00
Revere 36 f2.5 Mag	139.50		70.00
Victor IV f1.9 Tur		99.00	65.00
Vistascope Outfit Case	125.00		65.00
Zoomar 16 f2.8	600.00	395.00	300.00

16MM PROJECTORS

	New	Used	Trade-in
Ampro Imperial 1000 W case	$299.50	$197.00	$150.00
Bolex G-8-16 750 W (8mm & 16mm)	339.50	235.00	150.00
B&H 273A Statesman 750 W Case	199.95	117.50	90.00
B&H 173 Diplomat 1000 W Case	299.95	185.00	135.00
Keystone A82 750 W Case	139.50	75.50	60.00
Keystone K161 750 W Splicer Case	159.50	85.00	65.00
Kodascope Royal 1000 W	240.00	164.00	115.00
Revere 48 750 W	160.00	95.00	60.00

16MM SOUND PROJECTORS

	New	Used	Trade-in
Ampro DeLuxe Stylist 1000 W case	$419.85	$265.00	$185.00
Ampro Premier 40 1000 W case	579.00	397.00	250.00
B&H 285C 750 W Case	449.95	249.50	200.00
B&H 285 B1 1000 W Case	514.95	319.00	230.00
B&H 202C 1000 W Magnetic Case	699.00	444.00	375.00
Movie Mite 63LM 300 W Case	275.50	163.00	115.00
Revere SP16 750 W Case	325.00	163.00	135.00

ENLARGERS

2¼ ... up to 2¼x2¼ — C ... Condenser
23 ... up to 2¼x3¼ — D ... Diffusion
2-35 ... both 35 and 2¼x2¼ — CL ... Coldlite
45 ... up to 4x5 — AU ... Auto Focus

	New	Used	Trade-in
23C or De Jur II f4.5¢	$99.50	$59.50	$30.00
35C Federal 135 f4.5 storway	49.95	29.50	20.00
23D Federal 240 f7.9 storway	24.95	14.50	10.00
23D Federal 269 f6.3 storway	39.75	21.95	12.00
23C Federal 279 f6.3 storway	46.95	25.75	17.00
23C Federal 311 f4.5 storway	69.25	39.95	25.00
23CL Federal 315CL f4.5	80.00	49.50	30.00
45C-AU Bessler 45M AutoFocus	197.75		90.00
57C-AU Bessler 57MB AutoFocus	239.75		160.00
45C-AU Omega D3 AutoFocus	207.50		105.00
45C Federal 470 f4.5	129.50	82.50	60.00
45CL Federal 450CL f4.5	114.75	69.50	50.00
23D Fotolarger Merit f6.9	23.95	14.50	10.00
23D Fotolarger D45 f4.5	48.20	27.50	20.00
57D Solar 57D	86.50	40.00	35.00

EXPOSURE METERS

	New	Used	Trade-in
Argus	$16.95	$11.95	$8.00
Brockway (M3)	16.95	11.95	8.00
De Jur Dual Professional	26.95	15.50	10.00
De Jur 5B Spec	9.95	7.50	4.00
GE WD 68	24.50	11.50	8.00
USC No. 86	24.50	11.75	8.00
GE PR1	32.50	17.25	10.00
GE Mascot PR30	15.95	9.50	6.00
Gossen Underwater	69.50		30.00
Leica Meter	24.00	15.75	10.00
Minox Case & Chain	27.95	15.58	
Norwood Director	32.95	16.95	10.00
Polaroid	15.75	9.50	6.00
Sixti	24.95	15.50	10.00
Sixtomat X3	29.95	17.95	12.00
Weston Cadet	19.95	12.50	8.00
Weston DR w/case	16.50	11.50	8.00
Weston Master II Univ	29.95	14.95	10.00

¢ coated * flash synchronized

Prompt Free appraisal and Quotation will be gladly rushed to you by return mail. Mail Orders promptly filled. Paid or C.O.D., F.O.B. New York. Note: On C.O.D. kindly include 10% Deposit on Order. Include Postage. Prices Subject to change.

MINIFILM CAMERA CORP.

Where Customers Become Friends

1190 AVENUE OF THE AMERICAS · NEW YORK 36, N. Y.
(bet. 46th & 47th Sts.) JUdson 2-1416

(ONLY 2½ SHORT BLOCKS SOUTH OF RADIO CITY)

16th ANNIVERSARY GIFT FOR YOU! FREE COLOR FILM! Roll of 35mm or 120/620 ANSCOCHROME COLOR FILM. Yours this month with all equipment purchased in the month of August

MINIFILM MILESTONES

16 YEARS OF LEADERSHIP IN SERVING PHOTO FANS!

1945 FIRST TO PUBLISH ACTUAL TRADE-IN ALLOWANCES.

1947 FIRST TO EXTEND TIME PAYMENTS ON PHOTO EQUIPMENT.

1955 NOW—SETTING STANDARDS FOR THE BEST PHOTO VALUES EVER OFFERED.

IF YOU HAVE AN AUTOMATIC PROJECTOR ...SOLVE YOUR STORAGE PROBLEM

with a **baja case**

*ILLUSTRATED

The Outstanding Name In Special Design Cases And Cabinets

A BAJA CASE IS ALWAYS:

- Of The Finest Workmanship and Materials
- Smartly Styled
- Strong
- The Best Value For Your Money

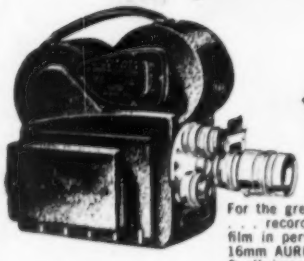
RV6* Accommodates 6 Revere Automatic Trays $5.95

RV15 Accommodates 15 Revere Automatic Trays 9.95

SE16 Compartmented Case Holds 16 Selectrays 9.85

AE16 Compartmented Case Holds 16 Airequipt Magazines or 14 Magazines Plus Airequipt Changer 9.85

MOVIES THAT TALK!!!



$69.50 DOWN

For the greatest thrill in Home Movie Making . . . record Voice and Music directly on the film in perfect synchronization . . . with the 16mm AURICON CINE VOICE. It combines the 2 all important dimensions . . . SIGHT and SOUND for True-to-Life Movies that will become more precious with the passing years. Surprisingly enough, Sound Movie Film in Black & White or Color costs no more than silent film. All you do is expose the film and record the sound at the same time. The film will be returned completely processed and ready to project in glorious sound.

BRAND NEW AURICON CINE VOICE OUTFIT COMPLETE... Including Cine Voice Sound Camera, High Fidelity Microphone, Amplifier, Headphone, Batteries and Carrying Case. **Cash $695.**

AURICON *Cine-Voice*

IT'S HERE!! NEW FEDERAL 47A HIGH FIDELITY TAPE RECORDER

★ PREMIUM FEATURES ★ SUPERB QUALITY ★ MODERATE PRICE

- For collecting a library of music
- For fun at parties
- For business lectures and meetings

OUTSTANDING FEATURES:

- Dual Speed 3¾-7½ IPS • Index Counter • Ext. SPKR Jack • Headphone Monitor Jack • Fast Forward or Reverse • Up to 3 Hours of Record or Playback
- 5x7 PM Speaker • Simplified Controls

FEDERAL 47A including microphone, patchcord, empty reel, roll of tape, carrying case. $159.50 ONLY $15.95 DOWN

FEDERAL 37C — Same specifications without index counter and headphone monitor jack $139.50 ONLY $13.95 DOWN

THE REVOLUTIONARY NEW 35mm BOLSEY JUBILEE "Threesome"

NOW OFFERS!

Exciting features

- High speed f2.8 Bolsey-Steinhell 45mm lens in famous Gauthier shutter
- Full set-o-matic controls (sets F stops automatically for black & white or color film . . .

OUTDOORS OR WITH FLASH!

- Unique balancing focusing levers require only fingertip action.
- Full synchronization at all speeds with electronic flash or bayonet base bulbs.
- Rapid film transport with the flick of the thumb . . . No lifting, no buttons to unlock.
- Military-type split image coupled rangefinder
- All Metal Flashgun screws in and swivels to permit bounce lighting without removing gun from camera!!
- Automatic shutter cocking coupled to exposure counter
- Shutter release on top of camera

Only $7.95 DOWN..... CASH $79.50

Complete with case and flash

NOW YOU CAN ENJOY SOUND MOVIES WITH YOUR 8MM OR 16MM SILENT PROJECTOR

The Remarkable CINESONE Magnetic Adapter Does The Trick!

Imagine...All your exposed silent footage can have dialogue, commentary and music!

IT'S FUN IT'S EASY IT'S INEXPENSIVE

No special knowledge required. Complete instructions furnished.

CINESONE MODEL A includes adapter and lead wires ready for plugging into Revere, TDC, or Masco Tape Recorders. $99.75 Only $9.97 Down

CINESONE MODEL PA includes adapter and preamplifier (for use with any recorder, optical sound projector, television, radio, amplifier, etc.). $155.00 Only $15.50 Down

CINESONE MODEL C includes adapter, complete amplifier, extension speaker, microphone, and carrying case. $199.75 Only $19.97 Down

FREE PAMPHLETS AVAILABLE

MINIFILM CAMERA CORP. 1190 SIXTH AVENUE NEW YORK 36, N. Y. CELEBRATE OUR 16th ANNIVERSARY SALE!

MINIFILM MILESTONES

16 YEARS OF LEADERSHIP IN SERVING PHOTO FANS!

1945 FIRST TO PUBLISH ACTUAL TRADE-IN ALLOWANCES.

1947 FIRST TO EXTEND TIME PAYMENTS ON PHOTO EQUIPMENT.

1955 NOW—SETTING STANDARDS FOR THE BEST PHOTO VALUES EVER OFFERED.

The BESELER ENLARGER is designed to give you these

7 MAJOR CONTRIBUTIONS TO BETTER ENLARGING

	CONTRIBUTIONS	BESELER ENLARGER	Other Enlargers
1	ABSOLUTE RIGIDITY OF FRAMEWORK with 4 Triangular Trusses. Bridge type structure offers needle sharp prints regardless of magnification factor.	YES	NO
2	ANY SIZE NEGATIVE WITHOUT CHANGING CONDENSERS. Saves buying, storing, cleaning extra costly condensers. Saves time and energy in darkroom.	YES	NO
3	AUTOMATIC ELECTRIC LAMPHOUSE MOVEMENT. Gives you exact control of lamphouse position, perfect control of image size.	YES	NO
4	BUILT IN SLIDING FILTER DRAWER for Safety, Printon, Varigam, 3-Color filters. Saves buying expensive color head. Filters lie in optically correct position.	YES	NO
5	HORIZONTAL PROJECTION AT PRECISELY 90°. Automatic return to 0° for Vertical use. Either way, absolute accuracy. Murals made quickly.	YES	NO
6	LAMPHOUSE MOVES FROM SIDE TO SIDE. For fast production work. For enlarging negative sections. Baseboard can use two 8x10 easels at one time.	YES	NO
7	LENS STAGE TILTS 20°. Tilting helps correct or create distortion. Enlarger becomes view and copy camera, vertically or horizontally.	YES	NO

Model 45M (16 mm to 4" x 5"). Cash Price: 198.75 with Motor and Lifetime Guarantee. (207.75 West of Denver.)

only **$19.87** DOWN

"Traditional" difficulties in enlarging are now solved with the BESELER ENLARGER. Professional Photographers attest to the Beseler's remarkable contributions . . . THE FIRST MAJOR CONTRIBUTIONS SINCE THE BEGINNING OF ENLARGING PRACTICE!

Read the outline of the EXCLUSIVE BESELER FEATURES at the left. Visit or write Minifilm for information on these NEW MONEY-SAVING FEATURES NEVER BEFORE FOUND IN OTHER ENLARGERS.

Model 57MB (2¼"x2¼" to 5"x7"). Cash Price: 239.75 with Motor Beslite Head and Lifetime Guarantee. (248.75 West of Denver).

only **$23.97** DOWN

CHARLES *Beseler* COMPANY

EAST ORANGE, NEW JERSEY

In 1868: America's FIRST Photographic Manufacturer — in 1955: The World's LARGEST Manufacturer of Opaque and Overhead Projection Apparatus.

MINIFILM CAMERA CORP. 1190 SIXTH AVENUE NEW YORK 36, N. Y. **CELEBRATE OUR 16th ANNIVERSARY SALE!**

MINIFILM MILESTONES

16 YEARS OF LEADERSHIP IN SERVING PHOTO FANS!

1945 FIRST TO PUBLISH ACTUAL TRADE-IN ALLOWANCES.

1947 FIRST TO EXTEND TIME PAYMENTS ON PHOTO EQUIPMENT.

1955 NOW—SETTING STANDARDS FOR THE BEST PHOTO VALUES EVER OFFERED.

The fully Automatic

Minolta AUTOCORD

TWIN LENS REFLEX

For only $99.95 DOWN Cash $99.50

A $200 VALUE . . . BY ALL STANDARDS

- Automatic film transport lever . . . one turn of the crank advances the film, sets the shutter, and counts the exposures.
- Finger tip helical focusing convenient lever for fast accurate pin point focusing.
- Rapid optiper MX synchro shutter speeds from 1 to 1/400 of a second—adjustable lever for full X or M flash synch.
- f3.5 Rokkor needle sharp 4 element coated lens.
- Double exposure prevention—multiple exposure possible.
- Built in self-timer.
- Separate windows for diaphragm and shutter settings readily seen from the top.

Minolta Autocord f3.5 Rokkor coated lens $99.50–ONLY $9.95 DOWN

The versatile superb

Minolta II

35mm CAMERA

for only $18.45 DOWN Cash $184.50

A MINIATURE GEM . . . . . BY ALL STANDARDS

- Combined Rangefinder and View Finder window
- Interchangeable lenses (accepts Leica or Canon Lenses)
- Variable self timer (adjustable up to 10 seconds)
- MX Flash synchronization
- Focal plane shutter (speeds from 1 to 1/500 of a second)
- Ultra sharp f2 super Rokkor 7 element lens
- Handsome, streamlined, compact design

MINOLTA II 35mm camera f2 super Rokkor coated lens $184.50 Only $18.45 Down

CHIYOKO — The trademark for one of Japan's leading quality camera and lens manufacturers for over 27 years

The trademark for one of America's most respected photographic organizations for over 21 years

HAVE COMBINED TO PROVIDE THE AMERICAN MARKET WITH 2 OUTSTANDING CAMERA VALUES!!

Vacation Time is TIME *for an . . .*

Elgeet TELEPHOTO MOVIE LENS

A telephoto lens brings you closer to distant subjects . . . gives your camera a front seat at sporting events . . . lets you take unposed candids from afar!

Elgeet offers precision telephoto lenses for most every camera—and every budget! Our more popular Elgeet telephoto lenses are surprisingly low in cost; Minifilm's low down-payment policy lets you enjoy more exciting movies now—and pay later.

- **Elgeet Cinematar lenses— budget priced—quality performers**
  - **for 8mm cameras:**
    - 38mm, f:3.5 (3X magnification), $17.95; **$1.80 down**
    - 38mm, f:2.7 (3X magnification), $29.95; **$3.00 down**
  - **for 16mm cameras:**
    - 75mm, f:3.0 (3X magnification), $47.50; **$4.75 down**
- **Elgeet Navitar lenses— made to the highest optical standards**
  - **for 8mm cameras:**
    - 38mm, f:1.9 (3X magnification), $49.95; **$5.00 down**
    - 75mm, f:2.9 (6X magnification), $63.45; **$6.35 down**
  - **for 16mm cameras:**
    - 75mm, f:1.9 (3X magnification), $73.50; **$7.35 down**
    - 102mm, f:2.7 (4X magnification), $88.95; **$8.90 down**

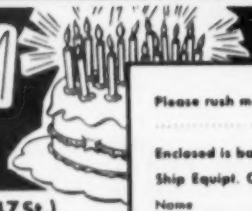
When ordering, specify camera name and model

THERE'S A MATCHING ELGEET WIDE ANGLE LENS FOR EVERY TELEPHOTO

MINIFILM CAMERA CORP.

1190 Avenue of the Americas (bet. 46-47 St.)
New York 36, New York JU 2-1416

. . . Where Customers Become Friends . . .



GET YOUR SLICE OF BIRTHDAY CAKE!

Please rush me the following equipment .....

..... **Price** .....

Enclosed is balance due .....

Ship Equipt. C.O.D. (10% down required) .....

Name .....

Address .....

City ..... Zone ..... State .....

Please send TIME PAYMENT & information.

NOW, SHOOT THRILLING WIDE-SCREEN MOVIES AND SLIDES!

AMAZING NEW VISTASCOPE LENS FITS YOUR PRESENT EQUIPMENT!

FIRST CINERAMA —— THEN CINEMASCOPE —— NOW VISTASCOPE!

For the first time, amateurs and professionals can achieve the effects Hollywood has produced. Just slip on VISTASCOPE and Presto!—you take *and* project 50% *more* in each picture! Your old pictures will look tiny and unrealistic by comparison!

BREATHTAKING FULL DIMENSIONAL REALISM

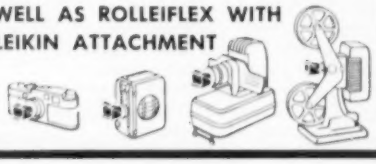
You get amazing you-are-there realism, surpassing even Hollywood's wide-screen realism.

Dotted lines show how VISTASCOPE lens increases horizontal area of your shots by 50%.

VISTASCOPE

LENSES FIT ALL 8 AND 16mm MOVIE AND 35mm* SLIDE CAMERAS AND PROJECTORS, AS WELL AS ROLLEIFLEX WITH ROLLEIKIN ATTACHMENT

Lenses come in special, unbreakable lined leather case.



50% MORE PICTURE! 50% LESS FILM!

HERE IS HOW VISTASCOPE WORKS

VISTASCOPE is a double-purpose anamorphic lens embodying the same principles as those used in the movies. When you place the VISTASCOPE lens on your camera, the 50% wider image is "squeezed" onto the same area of film that a regular lens would take. When the same VISTASCOPE lens is attached to your projector, the image is then "unsqueezed" onto the screen with no loss in image height—and absolutely no distortion.

VISTASCOPE IS EASY TO USE

- You use standard cameras . . .
- standard film.
- standard processing.
- standard screen.
- standard projector.

Just slip VISTASCOPE on to your regular or telephoto lens—then shoot—that's all! Two 16mm VISTASCOPES MAY be used to take widescreen stereo movies!

VISTASCOPE QUICKLY PAYS FOR ITSELF—SAVES 50% ON FILM COSTS

VISTASCOPE'S 50% wider image means less panning. You get close-ups and long shots in one frame. One shot now does what it took two or three before! The saving in film alone will pay for your VISTASCOPE!

NO-RISK OFFER!

TRY IT FOR 15 DAYS. UNCONDITIONALLY GUARANTEED TO BE THE FINEST ANAMORPHIC SYSTEM IN THE WORLD

Try VISTASCOPE for 15 days to prove to yourself the amazing things it does for you. If you don't get the most sensational, real-life, full dimensional realism, return the lens.

WHAT EXPERTS AND AMATEURS SAY:

Mr. B.R.C. of Philadelphia, Pa., says: "No words can express my sincere happiness for my new VISTASCOPE. I feel sure a mammoth boom is just starting for your wonderful lens.

JOHN GREGORY, Associate S.M.P.T.E.: ". . . results are truly remarkable . . . creates the effect of actually being there and taking part in the action . . ."

Mr. R.C.N. of Altoona, Pa., says: "I ran off my completed films in VISTASCOPE for my parents and they were amazed at the clarity, sharpness and size. You can certainly spread my good word about VISTASCOPE."

NORMAN C. LIPTON, Popular Photography: "Combines reasonable cost factor with unprecedented image quality. Over all sharpness and color correction."

LOW COST

For 8mm. movie cameras and projectors **$75.00** — Only **$7.50** down

For 16mm movie and 35mm* still cameras and projectors and Rolleiflex with Rolleikin. **$125.00** — Only **$12.50** down

* Having 65mm. or longer focal length. Example: Leica, Contax, Exacta, Canon, Nikon, Voigtlander, etc.

FREE MOVIE VIEWER!

To preview your VISTASCOPE films, order your VISTASCOPE lens now and receive absolutely free the sensational viewer.

THOUSANDS OF FANS ARE CLAMORING FOR VISTASCOPE

ORDER YOURS TODAY!

CINEMA LENS CO., Dept. PP9, 277 Broadway, New York 7, N. Y.

Gentlemen:

Please rush me the following:

☐ 8mm. VISTASCOPE lens.
☐ 16/35mm. VISTASCOPE lens.

Enclosed is $_____ ☐ Down payment ☐ Complete payment

(C.O.D.'s—10% down payment required)

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

CINEMA LENS CO.

277 BROADWAY COrtlandt 7-2192 NEW YORK 7, N. Y.

Headquarters for precision optical equipment.

References: Dun-Bradstreet National City Bank of N. Y.

here's the finest filter money can buy!

Tiffen® Ⓣ COATED

HI-TRANS®

Screw-In Filters

FINEST GROUND AND POLISHED OPTICAL GLASS, lifetime Thermo-Bonded and T coated, like the most expensive lens . . . and mounted in a screw-in COLORIM* which is threaded to the exact thread of popular lenses . . . rim colored to match the filter color (front threaded, to accept additional screw-in accessories). Remains on camera with case closed . . . LIFETIME GUARANTEED!

Fits most cameras and lenses including the following popular models:

STOCK No.	CAMERA or LENS	PRICE
SF-501	Kodak Stereo	$3.95
SF-701	Hasselblad	$8.95
SF-502	Argus C, C2, C3, 50mm f3.5	$2.95
SF-505	Signet "35", 44mm f3.5	$3.95
SF-505	Cine Ektar, 25mm f1.9	$3.95
SF-510	Contaflex, Tessar f2.8	$3.95
SF-522	Auto Rolleiflex f3.5	$4.50
SF-557	Vitessa Ultron 50mm f2	$4.25
SF-602	Sonnar 50mm f1.5, Sonnar 50mm f2	$5.25
SF-604	Pre-Set Biotar 58mm f2	$5.25
SF-606	Summitar 50mm f2	$5.25
SF-608	Retina II, IIA, IIB, 50mm f2, f2.8	$4.25
SF-608	Retina IB, IIC, IIIC 50mm f2.8	$4.25
SF-611	Summarit 50mm f1.5	$5.25
SF-611	Westanar Auto-Diaphragm 50mm f2.8	$5.25
SF-624	Leica Summicron 50mm f2	$5.25
SF-634	Rolleiflex 2.8C, Xenotar f2.8	$6.95
SF-639	Voigtlander Prominent 50mm f2	$5.25
SF-640	Argus C4	$3.95
SF-642	Schneider Xenon Auto. 50mm f1.9	$5.25

and many, many more!

At Dealers Everywhere—write for complete Tiffen catalog of Filter Accessories.

Tiffen MARKETING CO.
Rosyln Heights, L. I., N. Y.
* Pat. Pend.

IN CANADA, ANGLOPHOTO LTD - MONTREAL - TORONTO - VANCOUVER

stereo today by Robert L. McIntyre

Layer-cake Landscapes

There's a type of picture arrangement that appears quite often in landscapes submitted in club contests and the exhibitions, but you rarely see it in the slides that are accepted by the judges. It's easy to describe by likening it to a layer cake. There may be a strip of sky across the top of the picture, a layer of distant shoreline below it, an area of water in the middle, and some land in the near foreground. Most of the lines in such a picture are horizontal. This is particularly unfortunate in stereo because horizontal lines alone are incapable of producing any stereoscopic depth effect.

Vertical lines give the strongest three-dimensional effect. When they are placed at different distances we have to exercise convergence in order to bring together their dual images. Horizontal lines are weakest in 3D. Since all the stereoscopic displacement is sidewise, they overlap themselves in the two stereo images.

This provides a good stereoscopic reason for avoiding layer-cake landscapes, just to reinforce the basic pictorial argument that they don't make interesting pictures. Often a change in camera position will make it possible to introduce strong vertical or diagonal lines that will make your picture more effective.

Wide-Angle Stereo

Commercial photographers, wedding photographers, and amateurs with experience in using more flexible camera equipment have long been awaiting accessory lenses for stereo cameras. Up to now there have been only supplementary lenses for use in stereo close-ups, but Realist, Inc., has just announced a wide-angle attachment for general use. It consists of a pair of matched lens assemblies mounted in a holder designed to lock on the front of the camera. These lenses are made so that they produce a 25-mm focal length when used in conjunction with the regular camera lenses. They do it without affecting either the regular aperture settings or focusing scale. A special viewfinder is a part of the wide-angle attachment, which fits all Realist cameras prior to the new ST45 and is priced at $119.50.

The shift from 35-mm to 25-mm focal length means an increase of about 40 percent in the area that the camera covers. Putting it another way, the horizontal angle of view is increased from the usual 36.5° to 49.5°. That's a wider field than you get with regular 35-mm cameras, in spite of the extra width of their pictures. The Leica with normal 50-mm lens, for example, takes in 42°.

Wide-angle stereo is a very practical solution to many problems the commercial photographer encounters. When he has to shoot a big piece of machinery in a small room, he often faces the difficulty of not being able to back away far enough to get all of his subject into a single picture. The wide-angle attachment will prove of real value under conditions like these. It helps you to work closer to your subject and still cover a wide area. Pictorial applications of the device are more difficult to predict.

The stereoscopic ideal, theoretically, is the "orthostereo" condition in which the focal length of camera and viewer lenses is the same. If you have 35-mm camera lenses and 35-mm viewer lenses, when you look at a slide you will see the same thing you would have seen if your head had been located at the camera position in the original scene. It has become customary to provide viewer lenses that are somewhat longer in focal length than the camera lenses, both because they are cheaper to make and assemble and because they serve to exaggerate the depth effect slightly in a way that most people find pleasing. Today's viewers run from 44 mm to 50 mm in focal length. Few people complain, and only the perfectionist is likely to see the difference.

Attachment is mounted as a unit and held by central locking knob. Wide-angle view is indicated by special finder below attachment.

Shortening the focal length of the camera lenses from 35 mm to 25 mm, while using the same viewer, might be expected to disrupt the ortho-stereo condition violently. The change is not as drastic as it would seem. When nothing is close to the camera, you aren't likely to notice any difference at all—particularly if you don't have comparative slides of the same subject. People look normal at distances over 8 or 10 feet. Occasionally there will be an appearance of distortion you can find when you look for it. What happens is that an object at a given distance—say 6 feet—continues to appear to be at that distance according to the stereoscopic depth clues provided by the slide. Yet its image is smaller on the film than you would expect it to be at that distance, and objects within the view display more violent perspective than seems normal when you analyze it. We could interpret such pictures as close-ups of miniature subjects or as shots taken at normal distance of unusual objects which are elongated. All this, however, is interesting in theory but of little significance in practice. When we look at pictures of familiar objects, we know how they are supposed to appear and we are quick to discard any visual clues that fail to confirm this preconceived notion.—

Wake Up to PEERLESS

A PEERLESS SENSATION!

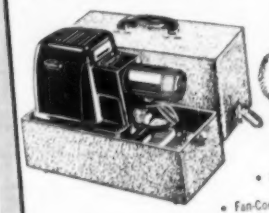
YOU SAVE $27.80 ON A BRAND NEW

KODASLIDE HIGHLUX III

300 WATT SLIDE PROJECTOR

with 5" f3.5 Coated Ektanon Lens

PLUS: KODASLIDE — HIGHLUX — BLOWER CASE



List $54.75!

26.95

Ship. Wt. 10 Lbs.

- High Light Output
- Fan-Cooled for Slide Protection
- Built-in Elevation
- Ready Access to Optics
- Easy to Use
- Sturdy Construction
- Discontinued
- Long Cord

A SPECTACULAR SPEEDLIGHT BUY

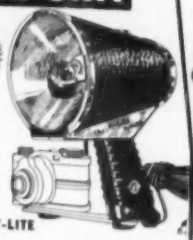
SAVE $33.55! BRAND NEW!

LATEST MODELS! FACTORY PACKED!

THRIFT-LITE IIX ELECTRONIC FLASH UNIT

List $59.50! Ship. Wt. 5 Lbs.

25.95



- Super Fast Flash—1/1000 Sec
- Completely Portable
- Unit Weighs Only 1.7 lbs.
- 60 Watt Seconds
- Complete One Piece Unit

ACCESSORIES FOR THRIFT-LITE

BATTERY PACK	List 24.50	Sale 14.95
EXTENSION LIGHT	List 29.95	Sale 21.00
INTENSIFIER (Doubles Light Output)	List 24.50	Sale 14.95

PLEASE STATE NAME OF YOUR CAMERA WHEN ORDERING

ANOTHER PEERLESS EXCLUSIVE BUY!

SAVE $54.00! ON A BRAND NEW 2¼ x 2¼

Peerflekta II

TWIN-LENS FOCUSING REFLEX OUTFIT

★ CAMERA ★ CASE ★ FLASHGUN

with f3.5 Coated Lens

AN $83.95 VALUE!

29.95

Ship. Wt. 7 Lbs.

- Built-in Flash Synchro.
- Fingertip Focusing
- Sportsfinder
- 9 Speed Shutter 1 to 1/200 Sec.
- Body Shutter Release
- Double Exposure Prevention
- Matched Ctd. Lenses are Coupled in Helical Mount
- Accepts 120 Roll Film

SAVE $24.55! BRAND NEW! FAMOUS

SVE Model B

2 x 2 SLIDE PROJECTOR

5" COLOR CORRECTED LENS

- Blower Cooled
- 300 Watt Lamp
- Lightweight
- Sturdy

List $49.50!

24.95

Ship. Wt. 17 Lbs.

SAVE $46.60! USED! LATEST MODEL

ROLLEICORD V

with f3.5 Coated Xenar Lens and FULL FLASH SYNCHRONIZATION

PEERLESS' LOW LOW PRICE . . . Quantities Limited!

List $134.55!

87.95

Ship. Wt. 7 Lbs.

- Compur Rapid Shutter
- Speeds 1 to 1/500 Sec.
- Delayed Action Self Timer
- Cross Coupled Linear Scales

SAVE $256.25! FAMOUS TURRET OUTFIT

BOLEX H-16

with DeLuxe Octameter

LATEST MODEL!

16mm MOVIE CAMERA WITH 3 LENSES

Used 228.95 List $685.20!

The Three Lenses!

- 17mm f2.7 Ctd. Wollensak W.A. Lens
- 1" f1.9 Ctd. Wollensak Lens in Focusing Mount
- 3" f4 Ctd. Wollensak Lens in Focusing Mount

YOU SAVE $35.00 ON A USED

ARGUS C3

35mm CAMERA OUTFIT

★ CAMERA ★ CASE ★ FLASHGUN

with f3.5 Coated Lens

PEERLESS' LOW, LOW PRICE . . . List $66.50!

31.50

Ship. Wt. 7 Lbs.

- Coupled Rangefinder
- Speeds to 1/300
- Clip-On Carrying Case

A SENSATIONAL CAMERA OFFER!

YOU SAVE $71.00 ON A BRAND NEW

Super Certo II

35mm CAMERA • GERMAN IMPORT

f2.8 COATED TESSAR, COMPUR RAPID MX SHUTTER, FULL FLASH SYNCH.

A $119.50 Value! Ship. Wt. 5 Lbs.

48.50

PEERLESS' LOW LOW PRICE . . .

- Synchro Shutter
- Double Exposure Prevention
- Split-Field Coupled Rangefinder

ANOTHER PEERLESS SENSATIONAL OFFER!

EXCLUSIVE! SAVE $32.00! BRAND NEW!

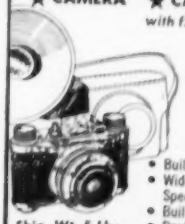
SPECIAL PURCHASE! GERMAN IMPORT!

35mm Classic '35' OUTFIT

★ CAMERA ★ CASE ★ FLASHGUN

with f2.9 Coated Triplan Lens

A $51.95 Value!



19.95

- Built-in Flash Synchronization
- Wide Range of 9 Shutter Speeds
- Built-in Optical Viewfinder
- Double Exposure Prevention

Ship. Wt. 5 Lbs.

IF YOU PREFER . . .

ONLY 10% DOWN!

BUYS EVERYTHING PEERLESS OFFERS AT NO INCREASE IN OUR LOW PRICES!

2 MORE PAGES of GREAT BUYS!

ONLY 10% DOWN!

BUYS EVERYTHING PEERLESS OFFERS AT NO INCREASE IN OUR WORLD-FAMOUS LOW LOW PRICES!

Wake-Up to

PEERLESS SUPER BUYS!

EVERYONE GUARANTEED ONE FULL YEAR!

ONLY A PARTIAL LIST OF GREAT BUYS . . . IF YOU DON'T SEE IT—WRITE—WE HAVE IT!

LEICA, CONTAX, NIKON, CANON

	New	Used
Canon IV S 2 f1.8 Serenar f	$284.00	$136.50
Contax I f2.8 Tessar		45.95
Contax II f2 Sonnar		82.50
Contax III f2 Sonnar		108.95
Contax IIA f1.5 Sonnar c*	374.00	168.95
Contax IIIA f2 Sonnar c*	383.00	189.95
Contax IIIA f1.5 Sonnar c*	412.00	194.50
Leica IIIC f3.5 Elmar c		89.95
Leica IIIC f2 Summitar c		119.95
Leica IIIF f3.5 Elmar c*	237.00	131.95
Leica IIIF f2 Summicron c*	336.00	177.50
Leica IIIF f1.5 Summarit c*	357.00	185.95
Nikon f2 Nikkor c*	269.00	152.95
Nikon f1.4 Nikkor c*	299.95	165.95

35mm SINGLE LENS REFLEX

Exa f2.8 Wester MXc	$ 85.00	$ 44.50
Kine Exakta f3.5 Tessar c*		69.95
Kine Exakta II f2 Biotar		99.95
Exakta V f2 Biotar MXc		118.95
Exakta VX f2.8 Auto Westanar	239.50	149.95
Exakta VX f1.9 Auto Xenon	341.70	195.95
Contaflex f2.8 Tessar Auto RF c*	169.00	83.95
Contax D f2 Biotar P.S. c*	199.00	118.95
Rectaflex f2 Xenon RF c*, case & shade	350.00	136.95

35mm CAMERAS

Bolsey B-2 RF, case and flash	$ 66.50	$ 39.95
Bolsey C22 f3.2 Reflex RF c*	99.50	66.95
Kodak Flash Bantam f4.5 c*	56.00	28.95
Kodak Pony 828 f4.5 C*	29.50	16.95
Kodak Pony 135 f4.5 C*	29.75	17.50
Retina II f2 Xenon RF		58.95
Kodak Retina IIA RF MXc	127.50	70.95
Kodak Town & Country f3.9 RF case & flash	75.00	48.95
Kodak Auto Retina III C f2 Xenon* f	185.00	116.95
Kodak Minor III5 chain & case*	139.50	84.95
Minox III f3.5c		48.95
Robot Star f1.9 Xenon Rap Seq. c*	127.50	78.95
Voigt Prominent f2 RF MX c	220.00	130.95
Voigt Vitessa f2 RF MXc	127.50	83.95
Voigt Vito II f3.5c*	54.50	23.95
Voigt Vito III f2 RF MX*	119.50	78.95

35mm STEREO CAMERA

Iloca II f3.5c*	$ 69.50	$ 48.95
Kindar f3.5 RFc*	99.50	58.95
Revere f3.5 RFc*	174.50	73.95
Stereo Realist f3.5 RFc*	159.00	65.95
Stereo Realist f2.8 RFc*	198.50	106.95
TDC Colorist f3.5c*	99.99	68.95

2¼ x 2¼ REFLEX CAMERAS

Ciroflex D f3.5c	$ 75.00	$ 46.95
Ciroflex F f3.2 MXc		66.95
Deje f3.5c	99.50	48.95
Graflex 22 f3.5 C*	93.00	46.95
Hasselblad f2.8 Ektar/1600 C*	476.00	278.95
Hasselblad f2.8 Ektar/1000 F	379.50	198.95
Ikoflex IIA Auto f3.5 Tessar MXc*	126.00	73.95
Kodak Reflex II f3.5c*		59.95
Ricohflex VI f3.5c*	44.95	19.95
Rolleicord III f3.5 Zeiss c*		66.95
Rolleicord IV f3.5 Xenar MXc	149.50	66.50
Latest Auto Rollei III f3.5 Xenar MXc	234.50	132.95
Latest Auto Rollei III f3.5 Tessar MXc	249.50	143.95
Latest Auto Rollei 2.8 C f2.8 Xenctar MXc	309.50	182.95

SLIDE PROJECTORS

Argus PB 300, case*	$ 48.50	$ 25.95
Goldi Manumatic 300 W.*	58.50	25.95
Goldi Coronet 300 W. case*	44.75	21.95
Goldi Reflex 300 W. case 2¼*	86.50	48.95
Kodaslide Signet 500 W*	72.50	48.95
Kodaslide Table Viewer 2x	37.50	26.95
LaBelle 55 Automatic 500 W*	95.00	49.95
LaBelle 75 Auto Remote 500 W case*	154.95	95.95
Revere 444 300 W*	69.50	30.95
TDC Headliner 300W Semimatic*	49.99	21.95
TDC Streamliner 500W Semimatic*	84.50	48.95
TDC Project-or-View 150W	69.50	46.95
TDC Project-or-View 200W*	77.50	47.95
TDC Stereo Projector 500W*	169.50	98.95
TDC Stereo Projector View 300W*	144.50	92.95
Viewlex V33L 300W*	67.00	38.95
Viewlex V35L 500W*	79.95	44.95

(Symbols: RF Coupled Rangefinder, c Coated, * Flash Shutter)

Highest TRADE-IN ALLOWANCE

Only 10% Down • EASY TERMS!

NEW LOW PRICE!

SAVE $207.80! Brand New!

EXCLUSIVE! LATEST MODEL GERMAN

HEXACON '35'

SINGLE-LENS REFLEX CAMERA

with f2.8 Coated PRE-SET TESSAR

Value $299.75!

91.95

Ship. Wt. 5 Lbs.

- Delayed Action Self-Timer
- Built-in Synchronization for Flash and Strobe
- Shutter Speeds from 1 to 1/1000
- Pentaprism Eye-Level Through-The-Lens Focusing
- Automatic Exposure Counter

BRAND NEW HEXACON '35' WITH:

f2 Coated T.H.C. — Value $400.00 ..... $4.95

f1.9 Ctd. Pre-Set Meyer Lens — Value $299.75 ..... $1.95

FREE! $29.75 KODAK B.C. EKTALUX FLASHGUN

with Each Purchase of . . .

HEXACON '35' with f2. Coated Pre-Set C.Z. Lens — Value $388.75! **124.95**

PLENTY ON HAND!

VERY LATEST MODELS! German Import!

Save $91.55! 35mm Single-Lens Reflex

RIVAL 35 MX REFLEX

with f2.8 Coated Lens

A $139.50 Value!

NEW LOW PRICE!

Ship. Wt. 5 Lbs.

BRAND NEW **47.95**

• Built-in Synchronization for Flash and Strobe • Combined Reflex Finder & Eye-Level Sportsfinder • Focal Plane Shutter Speeds ½ to 1/500 • Auto Film Transport & Shutter Cocking

RIVAL 35-MX REFLEX WITH

f1.9 Coated Meyer	Value	New
f3.5 Coated Preset Tessar	$160.50	67.50
f2.8 Coated Preset Tessar	$139.50	69.95
f2 Coated Taylor Hobson Cooke	$160.50	75.95
f2 Coated Preset Zeiss Lens	$330.00	79.50
	$220.00	94.95

BRAND NEW

Save $90.55! 35mm Single-Lens Reflex

PRAKTICA FX

with f2.8 Coated Lens

A $139.50 Value!

NEW LOW PRICE!

• Same Features As Above

BRAND NEW! **48.95**

PRAKTICA FX WITH

f1.9 Coated Meyer	Value	New
f3.5 Coated Preset Tessar	$160.50	68.50
f2.8 Coated Preset Tessar	$139.50	74.95
f2 Coated Preset Zeiss Lens	$169.50	77.50
f2 Coated Taylor Hobson Cooke	$220.00	98.95
	$330.00	82.95

BRAND NEW

A SENSATIONAL OFFER

SAVE $37.00! BRAND NEW!

35mm RIVAL '35'

with f2.9 Coated Lens

Peerless Low Price . . .

Value $59.95!

Ship. Wt. 5 Lbs.

22.95

• 9 Shutter Speeds to 1/250 Sec. • Built-in Flash Synch. • Double Exposure Prevention • Automatic Film Counter • Parallax Corrected Viewfinder • Body Shutter Release • Fingertip Focusing

YOU SAVE $49.50 ON A USED

KODAK SIGNET OUTFIT

★ CAMERA ★ CASE ★ FLASHGUN

f3.5 Coated Ektar Lens

• Flash Synchronized

• Double Exposure Prevention

• Coupled Rangefinder & Viewfinder

List $91.45

41.95

Ship. Wt. 5 Lbs.

YOU SAVE $115.55 ON A USED

8mm BOLEX H-8

with f1.9 Coated Lens

List $259.50

• 3 Lens Turret

• Tri-Focal Viewfinder

Used 143.95

BOLEX B8, Turret, f2.8 Ctd. Lens

List 119.50 Used 68.50 Ship. Wt. 5 Lbs.

YOU SAVE $45.55 ON A USED

35mm ARGUS C-4

with f2.8 Coated Lens

List $89.50

• Coupled Rangefinder

• Built-in Flash Synchronization

• Double Exposure Prevention

43.95

Ship. Wt. 5 Lbs.

YOU SAVE $23.00 ON A USED

Bell & Howell 220

8mm MOVIE CAMERA

List $49.95!

f2.5 Coated Lens

• "Sun Dial" Lens-Setting Device

• Continuous and Single Frame

26.95

Ship. Wt. 5 Lbs.

YOU SAVE $29.00! On A Used Famous

TDC MAINLINER

2 x 2 SLIDE PROJECTOR

with Selection Auto Changer

List $59.50!

• Coated Lens

• 300-Watt Lamp

• Blower Cooling

• Fingertip Focusing

30.50

Ship. Wt. 16 Lbs.

YOU SAVE $113.55 ON A USED

Auto Rolleiflex MX

with f3.5 Tessar Lens

List $239.50!

• Syncronized MX Shutter

• Built-in Self Timer

• Speed From 1 to 1/500 Sec.

125.95

Ship. Wt. 7 Lbs.

Auto Rollei f3.5 Xenar, Ctd. List 219.50 **119.95**

YOU SAVE $17.80 ON A USED

Federal 269 Enlarger

with 3½" Coated Lens

List $39.75!

• Negatives from 35mm to 2¼x3¼

• 75 Watt Lamp

21.95

Ship. Wt. 30 Lbs.

SAVE $58.85! USED! LATEST!

35mm CONTESSA MX

f2.8 Ctd. Carl Zeiss Tessar

List $142.00!

• Full Flash Synch.

• Compur Rapid Shutter

• Coupled Rangefinder

Speeds from 1 to 1/500

83.95

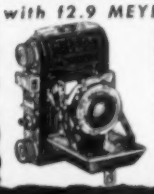
Ship. Wt. 5 Lbs.

A PEERLESS SENSATION!

YOU SAVE $41.55 ON A BRAND NEW! IMPORTED FROM GERMANY

35mm WELTI I

with f2.9 MEYER TRIOPLAN LENS



PEERLESS' LOW LOW PRICE . . . **25.95**

TOTAL LIST $67.50! Ship Wt. 5 Lbs.

- 9 Shutter Speeds—1 Sec. to 1/200
- Built-in Flash
- Double Exposure Prevention
- Parallax Corrected Viewfinder
- Auto Film Counter
- Body Shutter Release
- Helical Focus Mount
- Depth of Focus Scale
- Tripod Socket

PEERLESS CAMERA IF YOU DON'T SEE IT ON THESE PAGES—WRITE FOR IT—WE HAVE IT—AT PEERLESS' FAMOUS LOW PRICES!

PEERLESS

YOU SAVE $51.45 ON A BRAND NEW
EICOR 400 TAPE RECORDER OUTFIT
Complete with Microphone Case & Take-up Reel!

List $119.95! Ship. Wt. 25 Lbs. **68.50**
- Record up to 2 full hours & Plays Back to 3¾" per second
- Fast Forward & Rewind Speeds

RIVAL PLASTIC SOUND RECORDING TAPE
3 Rolls 7" Tape .... List 16.50 only $6.90
3 Rolls 9" Tape .... List 10.50 only $4.45

SAVE $77.50! 750 WATT! USED!
Ampro FUTURIST
8mm MOVIE PROJECTOR
- Blower-cooling
- 400 Ft. Reel
- Forward, reverse, still
- Auto Rewind

List $159.50! NOW ONLY **82.00** WHILE THEY LAST!

Save $126.95 Brand New! 4x5 Pacemaker
CROWN GRAPHIC OUTFIT
with Ektalite Field Lens and Graflex Back
KODAK BC EKTALUX PRESS FLASH GUN
- Camera with 135mm f4.7 Ctd. Graflex Optar Lens
- Kalart Rangefinder Installed
- Kodak B.C. Ektalux Press Flash Gun with Synchro Switch and Solenoid Installed

List $326.90! **199.95** Wt. 16 Lbs.
Discontinued

YOU SAVE $33.55 ON A USED
KODAK STEREO
with f3.5 Ctd. Lenses
- Built-in Flash Synch.
- Double Exposure Prevention

List $84.50! **50.95** Ship. Wt. 5 Lbs.

YOU SAVE $53.00 ON A USED
B&H MONTEREY
8mm MOVIE PROJECTOR Formerly $99.95!
with f1.6 Coated Lens
- 500 W. Illumination
- Fast Motor Rewind
- Blower Cooling

46.95 Ship. Wt. 17 Lbs.

YOU SAVE $6.00 ON A BRAND NEW
DeJUR 5B EXPOSURE METER
Complete with Case!
- For Black & White, Color, Movie or Stills
- ASA Indexes from .8 to 800
- Stop Range from f1.4 to f45.

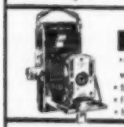
List $15.95 **9.95** Ship. Wt. 3 Lbs. Limited Quantities!

YOU SAVE $188.05 ON A USED
Zeiss CONTAX IIA
with f2 Ctd. Sonnar Lens
- Focal Plane Shutter
- Full Flash Synch.

List $345.00 **148.95**
CONTAX IIA f1.5 Ctd. Sonnar List $412.00 $168.95

YOU SAVE $46.05 ON A USED
LA BELLE 500
2 x 2 SLIDE PROJECTOR
f3.5 Coated Lens
- 500-Watt Lamp
- Blower Cooled
- Automatically Feeds and Changes Slides

List $95.00! **49.95** Ship. Wt. 16 Lbs.



SAVE $50.80! USED, FAMOUS
POLAROID 95
"PICTURE-IN-A-MINUTE"
with Coated Lens Ship. Wt. 10 Lbs.
- Built-in Flash Synchronization
- Focuses from 3¼ Feet to Infinity
- Model '95' Takes 3¼"x4¼" Pictures

List $85.75! **38.95**

GREAT SAVINGS ON USED FAMOUS MAKE
EXPOSURE METERS
SAVE $15.45! USED! FAMOUS MAKE!
WESTON MASTER II
EXPOSURE METER

LIST $39.95! **14.50**

	LIST	USED
NORWOOD DIRECTOR	32.95	$16.95
G. E. PR-1	32.50	16.50
DUAL SIXON	17.50	10.50

Average Shipping Wt. 3 Lbs.

FREE! SIX TDC SLIDE TRAYS!
For Rapid Indexing, Viewing & Storage of 180 Slides With the Purchase of This Slide Outfit!

Three Great Names Combine to Bring You This Spectacular Offer!
PEERLESS ★ Bell & Howell ★ TDC
SAVE $26.05! BRAND NEW! 300 WATT Blower Cooled Projector

TDC Showpak 300 OUTFIT

- COMPLETE WITH CASE,
- SEMIMATIC CHANGER
- 6 FREE TRAYS!

TOTAL LIST $66.00! Complete Outfit Only **39.95**
- Discontinued Model
- 4" COATED ANASTIGMAT LENS
- BLOWER COOLED
- ALL METAL CONSTRUCTION

Ship. Wt. 16 Lbs.

EXCLUSIVE!
AT THE LOWEST PRICES EVER!
Hambletonian BINOCULARS
- PRISM
- BRAND NEW!
- HIGH POWER!
- ALL METAL CONSTRUCTION!

COMPLETE WITH LEATHER CASE AND STRAPS!
High Magnification, Maximum Image Brightness and Large Objective Lenses Make the 7 x 50 Binocular Ideal for:
- NAVIGATION
- EXPLORATION
- YACHTING
- NIGHT VIEWING

Brand New 7 x 50 BINOCULAR
- Prism
- Individual Focus
- Lightweight
- High Power

22.50

OTHER GREAT HAMBLETONIAN VALUES:
7 x 50 Binoculars — Central Focus — Now Only 24.50
7 x 35 Binoculars — Individual Focus — Now Only 21.50
7 x 35 Binoculars — Central Focus — Now Only 24.50
8 x 30 Binoculars — Individual Focus — Now Only 18.50
16x50 Binoculars — Central Focus — Now Only 34.95
OTHER SIZES AVAILABLE AT COMPARABLE SAVINGS
Add 10% F. E. Tax

TRADE-IN NOW!
PEERLESS ALLOWANCES ARE HIGHER FOR YOUR PRESENT EQUIPMENT! BUY NOW — THE BEST FOR LESS!

PEERLESS SUPER BUYS!
EVERYONE GUARANTEED ONE FULL YEAR!
ONLY A PARTIAL LIST OF GREAT BUYS . . . IF YOU DON'T SEE IT—WRITE—WE HAVE IT!

8mm CAMERAS

	New	Used
B&H 134V f2.5¢	$ 89.95	$ 39.95
B&H 134TA f1.9 Turé	159.95	98.95
B&H 172 B f1.9 Mag ¢	164.95	99.95
B&H 172A f1.9 Mag Turé	199.95	117.95
B&H 252 f2.3 Montereyé	59.95	38.95
Bolex C 8 f2.8 Tvaré	89.50	62.95
Bolex L 8 f2.8 Tvaré		48.95
Bolex M 8 De Luxe f1.9 Turé	365.75	246.95
Bolex 8mm Pancinor f2.8¢	219.50	142.95
Kodak Brownie f2.7¢	37.50	20.95
Kodak Brownie f1.9¢	46.75	31.95
Cine Kodak Reliant f2.7¢	84.50	51.95
Cine Kodak Magazine f1.9¢	149.50	68.95
De Jur Citation f2.5¢	77.50	37.95
De Jur Embassy f2.5 Mag¢	106.95	56.95
De Jur Fadematic f1.9¢	149.50	92.95
Keystone K-29 Pathfinder f2.8¢	49.95	28.95
Keystone K-30 Capri f2.8¢	54.95	33.95
Keystone K-32 Olympic f2.5¢	79.95	45.95
Keystone K-35 Olympic Tur f1.9¢	119.95	76.95
Keystone Bel Air f2.5 Mag¢	89.50	46.95
Keystone Riviera f1.9 Mag Turé	139.95	91.95
Revere 50 f2.8¢	49.50	23.95
Revere 55 f2.8¢ case	73.50	43.95
Revere 88 f2.5¢	74.00	32.95
Revere 99 f2.8 Turé	99.50	53.95
Revere 80 f2.5¢	97.50	42.95
Revere 84 f1.9 Turé	147.50	83.95
Revere 67 f2.8 Mag Turé	119.50	58.95
Revere 40 f2.5 Mag ¢	99.50	52.95
Revere 44 f1.9 Mag Turé	154.50	92.95
Revere 861 f1.9 Mag¢	137.50	80.95
Revere 863 f2.5 Mag Turé	142.50	83.95

8mm PROJECTORS

B&H 221 500 W Case	$ 84.50	$ 49.00
B&H Regent 500 W Case	179.95	103.95
Bolex M-8 500 W Case	169.50	112.95
De Jur 750 W Case	159.50	82.95
De Jur 1000 W Cardomatic Case	177.50	104.95
Keystone KJ0C Brightbeam 500 W Case	69.50	39.95
Keystone K80 500 W Case	89.95	67.50
Keystone K95, 750 W., Case	119.50	68.95
Revere 85, 500 W., Case	124.50	57.95
Revere 90, 750 W., Case	159.50	66.95

ROLL FILM CAMERAS

Ansco Super Speedex f3.5 RFe*	$119.50	$ 78.95
Kodak Chevron f3.5 RF 800 MX	198.50	128.95
Kodak Medalist II f3.5 Ektare*	304.75	105.95
Polaroid Pathfinder f4.5 RF	249.50	146.95
Super Ikonta A f3.5 Tessar RFe*	99.00	55.95
Super Ikonta BX f2.8 Tessar RFe*	163.00	99.95
Voigt Bessa II f3.5 RF MXe	124.50	57.95

PRESS CAMERAS

45 Ann. Graphic RF f4.7 lens		95.95
2¼x3¼ Century Graphic f4.5 KRF e*	$145.45	96.95
4x5 Super D Graflex f5.6 Ektar Auto Dia e*	299.50	158.95
2x3 Linhof Super Tech RF 3 lenses comp.	569.90	317.95
4x5 Linhof Super Tech RF f4.5 MX	389.75	206.95
2¼x3¼ Pacemaker Speed f4.5 KRFe*	313.95	146.95
3¼x4¼ Pacemaker Crown f4.7 KRFe*	267.45	169.95
4x5 Pacemaker Crown f4.7 KRFe*	315.45	138.95

(Symbols: RF Coupled Rangefinder, ¢ Coated, * Flash Shutter)

Highest TRADE-IN ALLOWANCE

Only 10% Down • EASY TERMS!

ORDER YOURS TODAY!
1955 CATALOG
BIGGER AND BETTER THAN EVER

The greatest array of famous makes:
- Imports
- Major Equipment and accessories
- Completely illustrated with full description
- Current New & Used Prices
- Many, many famous new Peerless Exclusives! Also Tape Recorders
- Binoculars
- Audio Equipment. Gift Suggestions!

Order Yours Today! Only 10¢ Per Copy
25¢ Back On 1st Purchase

NEW REVISED EDITION

MONEY-BACK GUARANTEE!
All Items Offered Subject to Prior Sale! 10 Day Free Trial! 1 Full Year of Service! Add Estimated Shipping Costs. We'll Refund Every Cent Not Used! If you prefer C.O.D. Please Send 10% Deposit. The Supply of Some Items Is Limited. Since Orders Are Filled in Sequence, Rush Your Mail Order in Today! Worthy Substitutions May Be Made, Unless We are Advised to the Contrary!
PRICES SUBJECT TO CHANGE WITHOUT NOTICE

PEERLESS CAMERA STORES
415 Lexington Avenue, New York 17, N. Y.
Dept. P-9

☐ I WANT TO BUY _____
☐ I WANT TO TRADE _____
☐ Send New GIANT CATALOGUE. Enclosed find 10¢
Cash ☐ M.O. ☐ C.O.D. ☐
☐ Time Payment 10% Down Enclosed

NAME _____
ADDRESS _____
CITY/TOWN _____ STATE _____

PEERLESS CAMERA
415 LEXINGTON Ave. at 43rd St. N.Y. 17
Opp. Grand Central Terminal • MU 7-1000

MAIL COUPON TODAY

COMPARE

FINER 2½ x 3¼ (2X) COLOR PRINTS AS LOW AS 20¢

Compare our prices! Compare our workmanship! Compare our service! You'll agree COLOR KING prints are the very best!

SAVE!

BEST QUALITY! FINEST WORK!

Prints From Transparencies!

2½ x 3¼ (2X) ..... 25¢
(Only 20¢ ea. for any 10)
3 x 3 ..... 40¢
3 x 4 (3X) ..... 40¢
4 x 5 ..... 50¢
5 x 7 ..... 1.00
8 x 10 ..... 2.00

- KODACOLOR PRINTS .... 32c ea.
- ANSCOCHROME Anscocolor Ektachrome 35mm (20 Exp.) 120 620 — 90c
- EKTACHROME New High Speed Type E 35mm (20 Exp.) 120 620 — $1

DUPLICATE SLIDE SERVICE 35mm slides (20c ea. for any 10) ..... 25c ea.

Get Glamorous Color Prints! (Luxurious)

MAT-TONES

MAT-TONES have the deluxe-finished, non-glossy texture of studio portrait prints. Try a sample order. You'll be delighted with the results. Prices below are for prints from transparencies only. Kodacolor MAT-TONE prints 40¢ ea. Money back guarantee!

See the Difference!

(Prices from transparencies only)

2½x3¼(2X)	35¢	4 x 5	75¢
3 x 3	60¢	5 x 7	$1.50
3 x 4 (3X)	60¢	8 x 10	3.00

Save! Brand New

EKTACHROME ASA 32

and

ANSCOCHROME ASA 32

20 Exposure Magazines! Daylight Only!

NOT SURPLUS! NOT AERIAL!

3 ROLLS only $3.95

List price $5.55! Save over 25%!

Send cash with order. Satisfaction guaranteed or money back!

COLOR KING LABS

formerly Vivi Color Labs

Dept. P-2 • Box 1421 • Baltimore 3, Md.

color clinic

by David B. Eisendrath, Jr.

A famous technician solves your problems

I have sometimes seen color pictures published in photographic magazines where the technical data accompanying the picture says that the picture was made with an exposure of two or three minutes. How is it possible to measure or determine exposures in color of that length of time? It would seem that if a subject were so dark as to require a long exposure you couldn't take an exposure-meter reading.—B. J. R., Boise, Idaho.

This is one of those questions where a two-part answer must be given, and neither part will be entirely helpful in cook-book fashion. Yes, low exposure readings can be made in situations where the light level is so low that an exposure of minutes is indicated, although not with the ordinary exposure meter. There are some very sensitive meters of the photocell type (although they are large, not pocket size, and often require bulky boosters) and some of the better extinction-type meters will give readings of very low light level. However, in shooting color film at low light levels and where long exposures are indicated, reciprocity failure of the film is so critical that I do not believe exposures in the range of two and three minutes can be *accurately* measured.

The manufacturers of color film indicate that when exposures are made in the order of 120 seconds (two minutes) not only must correction filters be used, but you must open up your lens about 2½ stops beyond your calculation. At this range, I don't believe you would notice much difference between exposures of two minutes and exposures of four or five minutes. I strongly suspect that some of the pictures made with exposures running into minutes were exposed by "guess and luck."

Some months ago we wrote about moonlight and night exposures, and I still think that trial-and-error tests with a particular emulsion is the most reliable way to determine exposures for conditions such as this. The color and reflective surfaces of grass, sand, water, buildings, etc., varies so much that for pictures, especially in color, of moonlight or night effects at very low light levels, I'd frankly *guess* and bracket several exposures.

•

I want to shoot pictures of farm life here in Korea, but there is always a sky haze. Even on bright sunny days the distant landscape is affected. Is there any filter I can use for color for this which I can also use for black-and-white?—K. M. O., APO, San Francisco, Calif.

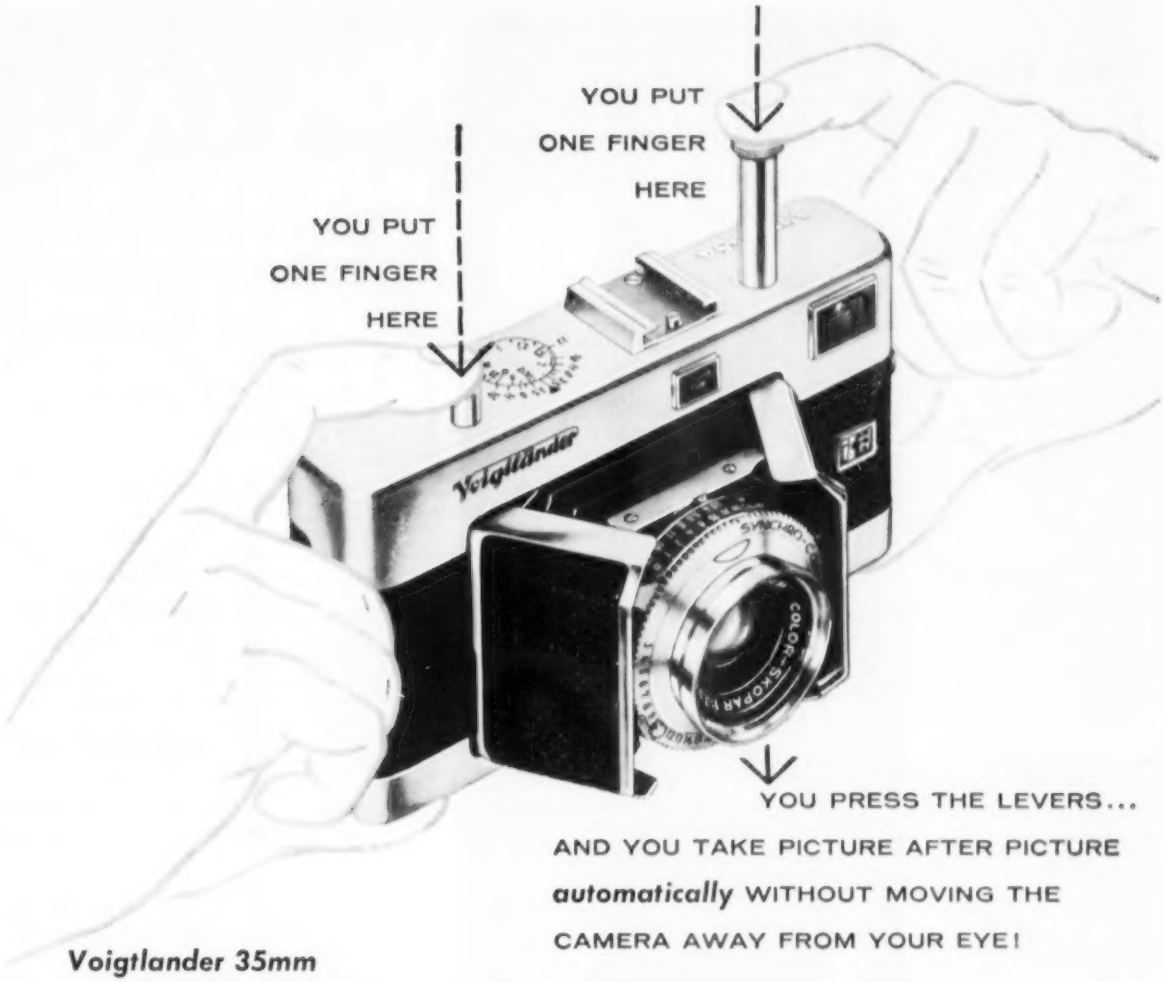
Shooting through haze in color is sometimes difficult—usually harder than with black-and-white film. If the haze you see is actually a smog where dust or moisture particles are actually suspended in the air—as over a ploughed field, for example—you may never eliminate or shoot through it. If the haze that you see, however, is the usual atmospheric blue, there are several things you can do about it. First recommendation is a filter such as the Skylight (1A) filter. Kodak also makes a filter called a 2B which is a little stronger and more effective than the Skylight, and might do better. These filters help to eliminate ultraviolet. Now, you may find that it isn't the penetration through the distant blue haze that disturbs you but that the general over-all blueness of distant scenes is bothering you. Here you might try one of the light-balancing filters such as the 81A or 81B. These are warming filters and often improve the over-all effect in photography of distant scenes. If there are people in the foreground, however, you may not like the additional warmth in the flesh tones. Many photographers who have tried the distant-scene pictures both with and without filters have come to the conclusion that there is no one certain filter for all occasions, and that, in many cases, capturing the delicate blue of the distant haze often tends to give a more natural effect.

As to a filter to use for both color and black-and-white photography, you can use the Skylight and 2B filters, although you'll do better by using some of the stronger filters designed for haze-cutting in black-and-white work. Color photography is almost entirely concerned with light in the visible spectrum, whereas in black-and-white photography you can work within the ranges of infrared and actually penetrate haze and other atmospheric debris most successfully.

•

I understand that it is possible to increase the apparent speed of color film by pre-exposure to colored cards. Is this practical, and how is it done?—D. T., Manchester, England.

As with black-and-white films, there are also many ways in which the apparent speed of the film can be increased. Prefogging by exposure to a white or blue light (or a clear sky) is an old method used with black-and-white films. What happens, roughly, is that the brief pre-exposure builds up a slight fog level and helps to boost a further minimum exposure in the camera over the threshold of sensitivity and to a point where a faint image can be made just printable. The idea of doing this with color films has been tried with both pre-exposure (and post-exposure, or after-the-picture-is-made exposure) to colored lights, to a white light through



Voigtlander 35mm

VITESSA *automatic*

You press one lever and the picture is taken. You press the other lever, and the film is transported, the exposure counted, the shutter set, the double-exposure-prevention locked in place — and you're ready for the next shot. What could be simpler, easier than that? In addition to this fine Voigtlander feature, you get a high precision Voigtlander lens; synchronized Compur M-X shutter; automatic parallax compensation; coupled rangefinder; far and near "zone" focusing; removable back for easy loading. Closed doors protect lens when not in use. You can take up to 36 pictures, in color or black-and-white, in less than one minute.

***With Voigtlander Color-Skopar f/3.5 lens; coated, color-corrected; distinguished for corner-to-corner sharpness*..... 99.50**

Voigtlander . . . Pioneer manufacturer of high precision cameras and lenses. Established 200 years ago, and leading the way ever since.

Voigtländer
VOIGTLÄNDER
because the lens is so good

WILLOUGHBYS 110 WEST 32ND ST., NEW YORK 1, N. Y.

The versatile, 35-mm., single-lens reflex
RECTAFLEX SX
with the astonishing, new
Makro-Kilar lens will let you take...

WIDE-ANGLE

STANDARD and

Photos by George Berkowitz

CLOSE-UP PICTURES
without extension tubes, bellows or supplementary lenses
The Rectaflex SX will take all three types of pictures with the one lens – the Makro-Kilar
It will focus from infinity to 2 inches! It is the only camera offering this amazing versatility.

With the Rectaflex SX, you also get
- Incomparable single-lens, reflex optical system that gives you the exact picture you see on the ground glass
- Eye-level focusing on a brilliant ground glass even when shutter is not cocked
- Built-in split-image rangefinder on the ground glass for critical focusing
- Shutter speeds of 1 second to 1/1,300 second on one dial
- Built-in synchronization for flashbulbs and electronic flash
- Lens interchangeability
- Helical focusing lenses from 28 to 600 mm. in focal length (some with preset diaphragm mechanism)
- Jeweled shutter movement
- Cartridge-to-cartridge film feed
- Complete line of accessories

With the Rectaflex SX, you also get the only complete guarantee ever offered with a camera! No other camera offers you these guarantees:
- Unconditional 2-year guarantee on entire camera against any factory defects
- Complete and FREE reconditioning of camera once a year (except for parts if needed and postage)
- Unconditional guarantee on jeweled shutter movement for LIFE
- Owner field test at our expense when camera is purchased

Learn what you are missing in photography! See the Rectaflex SX today at better dealers everywhere! Write for the name of the nearest dealer and free booklet J6 containing more information.

RECTAFLEX SX
with Makro-Kilar E
(40-mm, f/3.5, focuses from infinity to 4 inches)...$364.95

RECTAFLEX SX
with Makro-Kilar D
(40-mm, f/3.5, focuses from infinity to 2 inches)...$389.95

OMIC-RECTAFLEX
202 West 40th St., New York 18, N. Y.

filters, or to colored cards. When it works properly, it can give as much as one extra stop of speed BUT, that's an awful big *when*. As we keep saying, every emulsion of color film is different and with a technique in which so much error can creep into every step, we do not recommend this method of speeding up color film, though we must tell you that some experimentation of this sort has been used with motion-picture film where compensation for error can be corrected in printing the master duplicate or the release films.

The simplest and most successful stepping up of film speed is being done in the developing manipulation. You must start out with a lot of film all of the same emulsion and all stored properly under ideal conditions. Then you run some tests until you can determine the peculiarities of the specific emulsion you are using, and, making corrections for those peculiarities, you shoot the rest of the film you have of the same stock.

For example, you might make your first test by increasing the first developer time by five minutes, and decrease the color developer by one minute or more. You may find that the increased exposure is there, but the films are overcast with magenta. So you make new tests to see whether changing your wash time will help, or perhaps you decide to use a CC-10G (green-hued) filter to offset the magenta. Whatever routine you find that gives you good results will, if properly controlled, probably hold for shooting the rest of the film of the same emulsions. But when you switch to a new emulsion, watch out—because it may act quite differently.

One thing you must remember is that the manufacturer only guarantees the film to behave properly with the handling and processing that he recommends. Any manipulation on your part which brings success may depend solely on marginal characteristics of the film. It's like blaming General Motors because you tried to soup up your car to run 200 mph and it doesn't steer so well at this speed!

•

NOTE: Some time ago we mentioned "Plasti-Tak," the putty-like stuff that many of the big labs use for cleaning fingerprints and grease marks from color film (as well as lenses and cover glasses, too). We thought most big photo stores would know about it, so neglected to put in the address of the manufacturer. Wow! We were swamped with letters from readers who couldn't find or buy it. Since it's unique, we're letting you know that if your dealer doesn't have it, and if you wrote and got your letter back, we're terribly sorry. Write direct to Brooks Mfg. Co., 1514 Aster Place, Cincinnati 24, Ohio. Sorry.

Questions of general interest to the color photographer will be answered in this department. However, individual replies can not be given for questions that are not used.—Ed.

"DIFFERENT" B&W 35MM TRIAL PACKAGES
"IMPORTED FILMS" "SPECIAL KODAK FILMS"

2 x 2 GLASS SLIDEBINDERS

'LIKE MONEY IN THE BANK AIR PHOTO'S ALL STAR SALE

35mm EKTACHROME
Respooled from Aero Ektachrome
You save because this is respooled from Super Speed Aero Ektachrome. 4 times faster than Kodachrome. Specify Daylight or Tungsten.
Guaranteed 'til Dec. '55.
5 FOR 3.98 55c PP

BEST BUYS

35mm x 100 ft. FILM

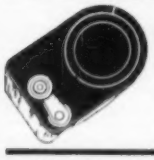
Over 30 cartridges from one roll of 100 ft. Many months supply—ready when needed.

KODAK SUPER XX	1.79	KODAK PLUS-X	1.50
Ansco Ult Speed	1.50	Dupont Sup #2	1.25
Background X	1.25	Kodak Tri-X	2.25
Kodak Positive	1.75	Kodak Panatomic-X	2.25
Guaranteed 'til Feb '56		Ansco Color daylight	18.95

35c post & ins on order

35mm ANSCOLOR
35mm x 20 RELOADS
Tungsten or Daylight. Shoot color at black & white prices each **89¢**
Guaranteed 'til Nov. 1955
Minimum order at this price 5 for 4.45 plus 55c post

120 EKTACHROME
Only at AIR PHOTO will you find such value. Popular 120 size for roll film cameras. At this price you'll be wise to stock up!
Guaranteed 'til Jan. 1956
74¢* EACH
20c Postage
* Minimum order 4 rolls 2.96.



LOW PRICED BULK FILM LOADER
Slash your film costs as much as 90%. Load your own 35mm cartridges even in bright daylight. **4.95**
45c post & ins.
SPECIAL COMBO—100' of 35mm black and white film and above loader. Special 5.95
65c post & ins.

35mm ANSCO COLOR
50 ft. of sparkling memories. Load your own 14 cartridges. Indoor or Out, complete with filter (specify) .. **7.95**
35c post
Guaranteed 'til Jan. 1956

VARIGAM
This versatile enlarging paper can lend itself to many uses.

10x10	Hi-Speed or reg. SW, SM (A) 250	7.50
11x14	Hi-Speed SW semi-gloss '54 date. 50 sheets	3.75
100		7.25

85c post & ins.

7" f2.5 AERO EKTAR LENS

BRAND NEW **$67.50**

Now with diaphragm and hard coated optics. Lens can be adapted to fit any Speed Graphic, Press & View camera, Leica, Contax, Exakta, all types of motion picture cameras, as well as special application. (Custom made adapters available, prices on request). Gov't cost of lens was over $300.00.
Bed-brace & tubes for 4 x 5 Press....17.95
Precision Exakta focusing mount....79.50
add 1.75 shpg

16mm MOVIE FILM
50 ft. MAGAZINES
SUPER X
SUP XX ea. **2.35**
3 for 6.75 ..... 45c post
100 ft. ROLLS
SUPER X
SUP XX ea. **3.95**
3 for 10.50 ..... 65c post
FREE EASTMAN KODAK PROCESSING

ENLARGING PAPER
8x10 BROMIDE
Single wt. semi-mat #2, 3. **2.69**
100 sheets
Single weight glossy, #F1, F2, & F3 ..... 3.29
11x14 double weight, matte lustre, #2, 3, 4. 50 sheets **3.50**
85c post & ins.

36" f6.3 LENS
BIG BERTHA TELE

Dallmeyer. Complete with iris diaphragm. Can be adapted to almost all types cameras, i.e. Graflex, studio and view.
Value $800.00
Like new **199.50**
Shipped via express

WORLD'S FAMOUS WIDE ANGLE

100mm f6.3
MEYER coated
ARISTOSTIGMAT
Compur-Rapid
Synchro Shutter
For all 4x5's Speeds 1 sec up to 1/400. List $92.00. BRAND-NEW .. **32.50**
85c post & ins.

ROLL FILM
For 120 & 620 cameras (specify). You save at 24.9 cents per roll!
Kodak
SUPER XX
TRI-X 10 ROLLS **2.49**
INFRA-RED—8 ROLLS
35c ea. order post & ins.
Guaranteed 'til Feb. 1956

FILM PACKS
EASTMAN KODAK PLUS-X
2¼x3¼
EACH
Min order at this price 3 for 2.95
10 for 8.50
35c post & ins.
4x5 SUPER XX—3 for 3.75
Guaranteed 'til Jan. 1956
SEND for free Bulletin **99¢**

Famous Make
SPEED LENS

for 35mm enlarging 2" f 3.5
All optics coated, overcomes difficulties in focusing. Complete with mounting flange. List $39.85
BRAND-NEW **8.95**
ADD 35c post & ins.

TELE-LENS
FOR ALL 16mm MOVIES
3" f1.9 COATED

Here's a lens to fit all camaers (specify) to fit all exacting work. In focusing mount; engraved depth of field scale NEW
Reg. $67.50 **27.50**
45c P&I

SAVE 31.55
35mm REVERE 444

This is the sensational new 35-mm slide projector you've been hearing about. Highly acclaimed by all who've used it. Complete with case. 13.5 lens. 300 Watt blower cooled. List $69.50. Used ..
1.50 post & ins. **37.95**

NOW REDUCED
Jumbo Gadget Bag

Holds about everything you'll need. Large roomy 5x10x12 size. Genuine Pigskin. Tuf stitching. A 34.95 value drastically reduced. Now BRAND-NEW **13.95**
65c post & ins.

GREAT SPECIAL
3 SECTION SUPER ACTION GEAR DRIVE

TRIPOD
Extends to full 72" Closes to only 30" extra 12" on elevator.
BRAND NEW **16.50**
VALUE 22.00
Add 85c post & ins.

AIR PHOTO SUPPLY CORP

Dept. PA-9 555 East Tremont Ave. New York 57, N. Y.

SUPPLIER TO THE UNITED STATES GOVERNMENT

Guaranteed Safe Delivery Anywhere in the World

OUR POLICY
Film & paper is outdated surplus and guaranteed equal to fresh. You must be SATISFIED! Prices F.O.B. N. Y. Include postage. Minimum orders $2.50. 50c service charge for orders under 2.50 C.O.D.'s with 25% deposit. Subject prior sale.

Fresh 35mm Safety

Film is a matter of confidence—you never know, if you get a 'bargain' until it is too late. Spiratone's prices are the lowest possible—for consistently reliable film. That's why not only thousands of amateurs, but scores of professionals, of hospitals and colleges, of scientists and government agencies—in short, critical users who can't gamble—rely on Spiratone. Play safe—use only Spiratone tested and recommended film.

Spiratone PRIVATE BRAND COLOR FILM

COLOR FILM COSTS SLASHED BELOW THE USUAL COST OF BLACK & WHITE FILM!

A carefully quality-controlled colorfilm, processed in one of the country's most modern plants. Made to our specifications, the low cost is due to direct maker-to-user distribution.
Spiratone Private Brand would cost just as much as other color films, if sold through the usual channels.
Private Brand Color Film is available in Daylight (ASA 16) and Tungsten (ASA 16) types, requires the same correction and conversion filters as Kodachrome. 20 and 36 exposure rolls are delivered ready for use in new cartridges.

20 Exposures		36 Exposures		Prices include 5-day processing and mounting. *Shpg. Chge. 10c*
each	$1.89	each	$2.49	
3 for	5.39	3 for	7.77	

World's Widest Selection of

COLOR FILM PROCESSING

for 120, 620, 35mm 20 exp. films

ANSCOCOLOR, ANSCOCHROME, EKTACHROME, AERO EKTACHROME	.75
ANSCOCHROME, EXPOSED FOR ASA 64 OR 128	1.25
AGFACOLOR, DUFAYCOLOR, GAEVACOLOR	2.25
KODACHROME, 36 EXP. $1.50	20 EXP. 1.00
ANSCOCOLOR, ANSCOCHROME, INCL. STEREO MOUNTING (16 prs.)	1.50

35mm INFRARED FILM, IR BULBS

This film is really a challenge to the imaginative photographer. It penetrates distant haze, takes "moonlight" scenes in broad daylight, creates unusual contrast effects. Use orange or red filter. For extreme results, use special INFRARED FILTER. Ser V $1.39, Ser VI $1.59, Ser. VII $2.98. *Kodak Data Book on Infrared 35c.* For Blackout (invisible) flash photography use INFRARED FLASHBULBS, 5/$. Each 22c, 12 for $2.25. 4x5 KODAK INFRARED CUT-Shpg Chgs 1-3 5c, 5-10 20c FILMS—25 for $1.00, 100 for $2.50.

20 exp. roll, 50c—5 for $2.00 **27½ ft., $1.79—50 ft. $2.70**
36 exp. roll, 80c—3 for $2.00 **100 ft., $4.79—200 ft., $7.70**

35mm IR TRIAL PACKAGE 3, 20 exp. IR films, Data Book, IR Filter (specify Ser V or VI), & IR bulbs, all for **$4.95** ppd.

KODAK 35MM MICROFILE

An extremely fine grain pan film for making reduced copies of books, letters, etc. ASA fun. 16. Has finest resolving power of any 35mm film. 175 line per mm (double that of Plus X).
Prices for 20 exp., 36 exp. bulk, same as Infrared.

ANSCOCHROME INCLUDING PROC. FOR ASA 128

35MM 20 EXP. **$2.59** incl. 3 for $7.50
120 OR 620 **$2.39** incl. 3 for $6.60

Spiratone is proud to be first to offer the new Anscochrome with the revolutionary speed-increasing processing described in the June '55 issue of "Photography," enabling you, for the first time, to take fast action shots, shoot in poor light, as you would with a fast B&W film!

35mm DAYLIGHT LOADER

$4.95 INCLUDING 5 CARTRIDGES IF PURCHASED TOGETHER WITH MINIMUM OF $7.95 WORTH OF BULKFILM.

It's so simple to take advantage of the exceedingly low cost of 35mm bulkfilm and to load any desired length into a standard Eastman cartridge. First few reloads already make loader pay for itself. **Loader alone with 5 cartridges, $5.95.** *Sh. Wt. 2 lbs.*

DELUXE LOADER, with automatic counter, accepts also Leica, Contax cartridges — $10.95 or add $5.00 to comb. offers.

FREE FILM TONGUE CUTTER with your order for $5.00 or more of bulkfilm, or $4.25 worth of bulkfilm plus loader for perfect shaping of tongue to assure smooth loading. Must be requested at time of purchase.

35MM ASA 32 STEREO-ANSCOCHROME $2.98 ea. 3 for $8.69

Appr. 16 pairs on a roll, incl. processing and stereo mounting. *For ASA 128, add 50c per roll. Shpg. Chge. 10c.*

THE FINEST, FRESHEST, SAFETY ANSCOCOLOR

SPECIFY IF DAYLIGHT OR TUNGSTEN

RELOADS INCLUDING PROCESSING
EA. $1.00 6 for $10.80 24 for $37.20
$1.55 EA. IN LOTS OF 24
In metal Kodak cartridges—processed within three days in our modern laboratory!
Shpg. Chgs. 1—5c, 6—30c.

ANSCOCOLOR, FULL TUNGSTEN TYPE
27½ ft. incl. 5 cartr. ... $4.95
50 ft. incl. 8 cartr. ... 8.50
100 ft. incl. 10 cartr. ... 15.95
Shpg. Chgs. 25c, 35c, 50c.

ANSCOCOLOR CUT FILM
10 for $2.75, 40 for $8.95

EKTA and EKTA ANSCOCOLOR
1956 dating, factory packed. Prices include rapid processing. Specify daylight or tungsten. $1.39 ea., 3 for $4.00.

COMBINATION OFFERS
TUNGSTEN TYPE
Daylight Loader, 27½ ft. Anscocolor, 10 cartridges, 100 glass binders. All for **$11.95**
"Develop Your Own Anscocolor Film Outfit", consists of 27½ ft. Anscocolor, Film Tongue Cutter, eight cartridges, a quart-size Anscocolor Developing Kit and the helpful book 'Color Photography Made Easy' with taking and processing instructions. All for **$8.25**
Shp. Wt. 2 lbs.
Above outfit, plus daylight loader and five more cartridges **$12.95**

TRIAL SET 20 exp. Anscocolor Reload, chemicals for processing, mounts and simple instructions—All for **$2.10**
Shp. Chg. 25c

"DIFFERENT" B&W 35MM TRIAL PACKAGES

"IMPORTED FILMS"	"SPECIAL KODAK FILMS"	
20 exp. Ilford HP3, ASA 125	20 exp. Microfilm	80 exp. $2.25 ppd.
20 exp. Adox KB 14, ASA 16	20 exp. Infrared	
20 exp. Adox KB 17, ASA 32	20 exp. Tri-X ASA 200	
20 exp. Adox KB 21, ASA 80	20 exp. Fine Grain Panatomic X	

Both B&W Trial Packages (160 exposures) $4.15 ppd.

AERO EKTACHROME

In response to the great demand for dependably presented, properly processed Aero Ektachrome, we have, after exhaustive tests, made arrangements with an excellent laboratory, assuring the only correct processing which will produce good results. Allowing for an ASA speed 40 for well-balanced transparencies. Prices include 48 hr. processing and return postage. *Shipping Charge 1-2 5c, 3-6 20.*

35MM IN METAL CARTRIDGES
20 EXP. **$1.77** ea. 3 FOR $4.80
120, 620, 8 exp., 2¼ x 3¼ or 12 exp. 2¼ x 2¼ **$1.88** ea. 3 FOR $5.25

35MM ANSCOCHROME ASA 32—DAYLIGHT

20 exp. reloads, in metal cartridges, ea. ... **$1.50**
3 for $4.19, 7 for $9.50.
Ship. Charges 5c, 10c, 25c.
TRIAL SET: 20 exp. Anscochrome reload, chemicals for processing, all for ... $2.62
TRIAL SET, for ASA 128 ... $2.98
Ship. Chge. 25c

OFFER 'A' 28 ft. roll, in Easy loader, makes 8 — 20 exposure rolls, incl. proc. by us ... **$14.95**

OFFER 'B' 28 ft. roll, in Easy loader, 8 cartridges, Qt. size Developing Kit, 100 glassbinders. *Shpg. Wt. 6 lbs.* ... **$14.95**

FRESH SAFETY KODAK B&W FILM

All four popular speeds, Panatomic X (Background X), Plus X, Super XX, and Tri-X are available in 27½ ft., 50 ft. and 100 ft. lengths and 20 and 36 exposure reloads.

27½ FT. **$1.39** 50 FT. **$2.29** 100 FT. **$3.98**
Shipping charges 10c, 30c, 40c

COMBINATION SPECIAL
Daylight loader with 5 cartridges and 100 ft. of black & white film, a $9.90 value **$7.99**
Shpg. Wt. 4 lbs.

BLACK & WHITE RELOADS in metal cartridges may be assorted
20 EXP. **40c** ea. 6 for $2.00
36 EXP. **60c** ea. 4 for $2.00
Shpg. Chgs. 1 or 2 5c; 3 to 5 20c; 6 to 12 35c.

ALL YEAR B&W ASSORT.
Daylight loader with 5 cartridges plus 27½ ft. each of Panatomic X, Plus X, Super XX and Tri-X **$10.49**

Fall Special **FREE** with every 100 ft. b&w 35mm bulk roll: 36 exp. Infrared or Microfile!

2 x 2 GLASS SLIDEBINDERS

- **Comparable to 6c slidebinders.**
- **One of the finest methods of mounting transparencies (35mm Argus, Leica size) betw. glass!**

2½¢ ea. in lots of 200

The biggest bargain in quality slidebinders ever offered. Pregummed Fibreboard, self-centering of slide, provision for type-on titles, dustproof, linffree, shockproof—all these advantages are yours for less than the usual cost of glass alone! Why risk fingerprints and scratches on your irreplaceable color shots? **200 for $5.00.**
Shipping Weight 5 lbs.

Sample package of 20 2x2 glass and 3 2x2 metal binders, postpaid ... **$1.25**

200 singleframe (Mercury) Masks $1.75 | Masks fit glass
200 Square (Robot, Tenax) Masks $1.75 | & metal binders
2x2" cardboard mounts for single frame (Mercury size) transparencies **50 for 55c.** *Sh. Wt. per 100, 1 lb.*

800 for $18.95

2 x 2" 10 PC. NATIONAL PICTURE SLIDE SETS

50% OFF Yes, these famous sets of 2 x 2" full color slides of which hundreds of thousands have been sold at $1.00 per 10 are now brought to you at half price! Scenics from all over U. S. and many foreign countries, and children's stories — any eight sets (80 full color 2x2 slides with subject matter imprinted) $4.00 postpaid. Each number contains 10 dif. slides. **Choose from these:**

1. Shrines, Wash., DC
2. NY's Hudson River
3. Rodeo in Calif.
4. Block Island
5. Around NY City
7. From the Empire State Bldg.
8. Wash., D. C. Landmarks
9. Times Square to Central Park
13. Bryce Canyon
14., 14A., 14B., 14C. Yellowstone
15. Washington, D. C.
18. Big Bend Nat'l Pk.
20. Hialeah Racetrack, Florida
22. Miami Bus. Dist.
24., 24B. Sightseeing in Fla.
25. Hollywood to Frisco
25A. California
27A. NY-Midtown
28. NYC Financ'l Dist.
29. Williamsburg, Va.
29B. Virginia
31. Chicago, Illinois
33. Grand Canyon
34. Col., Estes Ntl. Park
35. Kansas City, Mo.
40A. Atlantic City, N. J.
*44., 44A Mackinac Isle, Mich.
92. Paris, France
54. Southern France
60. Madrid, Spain
71., 72. Ireland
80., 81., 82., 83., 84. Rome, Italy
85., 87 Vatican City
88. Genoa & Columbus
101. Cairo, Egypt
110., 111. Bombay, India
120., 121. Lisbon, Portugal
130. Alaska
140. Switzerland
145. Austria
151. Istanbul, Turkey
160. Athens, Greece
180., 181. Mexico
190. Bermuda
191. Havana, Cuba
202., 203. Canada
208. Australia
211. Haifa, Tel Aviv, Israel
and 5 different Children's Tales Sets

Two sample sets (20 slides) with complete lists $1.35 ppd.
Act fast—the supply is limited. State some alternates, please.

GERMAN ALL-METAL RANGEFINDER $2.95

Employs super-imposed image system for rapid, accurate focusing from 2 feet to infinity! All-metal construction, leather covering, modern styling. Specify feet or meters. **Case 49c.** *Shpg. Chg. 10c*

FAMOUS MAKE PHOTO ELECTRIC EXP. METER

- **Sensational import from Germany!**
- **Sturdily constructed, with super sensitive electric eye for maximum range!**
- **Settings from 1/1000 to 60 sec, f:1 to f:22, ASA 4 to 250.**

A $15.00 VALUE **$5.59** WITH ER CASE

Most compact—2" x 3" x 1" and light. 4 oz. Snap open protective cell cover, set desired shutter speed opposite pointer—and you are ready to read off correct opening for your film. One hand operation. One year guarantee by Spiratone and manufacturer. *Shp. Cost 10c*

METAL SNAKE CHAIN $1.29 PPD.

FOR EKAKTA, LEICA, RETINA, PONY AND OTHERS
Smoothly suspends camera at chest height for worry-free carrying without case! Elegant, practical, safe and luxurious—at half the usual cost. With new safety locks, $2.59.

TIME EXPOSURE & DELAYED ACTION NOW ADDED TO EVERY CAMERA

AUTOKNIPS II WAS $4.95 **$2.95**

This most popular of all self-timers in conjunction with a cable release, adds to your camera a feature many a photographer has paid a small fortune for. 11 slow speeds from ½ a second to ten seconds! *Ship. Cost 10c*
CABLE RELEASES: 4" 25c 7" 35c 10" 45c 40" $1.25

SAVE 60% ON BRAND NEW SYNCH COMPUR SHUTTER

$19.95 PPD. This most famous of all shutters has 8 speeds, 1 second to 1/200th, X-delay synch for flash and strobe, cable release socket, delayed action diaphragm scale from f:4.5 to f:32. Appr. inside diameter for front elements is 1½" for rear elements 1⅝.
Same shutter, without delayed action, but with blade arrester (Press-Compur) ... **$24.95**

7 SECTION POCKET TRIPOD

- **Folds down to 9" and right into your pocket!**
- **7 sections extend to 4 ft., sturdily supports 35mm and light 2¼ x 3¼ cameras.**
- **Rubber tips, leg stops.**

Wt. 13 oz. Sh. Chge. 35c
$6.19
With Accura tiltstop, $6.90

WALKING STICK TRIPOD, extra rigid, legs fit together to make a walking stick 42" high. Reg. $8.82. Shpg. wt. 3 lbs. ... $2.98

TRIPOD OF THE MONTH

WITH SPIRATONE PANHEAD $6.66

- **Five-section brass, beautiful chrome finish. Extends to 46".**

Ideal for 35mm, 2¼ x 2¼ reflex, small folding cameras. Single motion panning and tilting action, locked by simple turn of handle. You'll agree this outfit should sell for double. *Ship. Wt. 4 lbs.*

3 UNIT REFLECTOR OUTFIT $5.49

- **Two aluminum 10" reflectors for #1 or #2 bulbs**
- **One bullet reflector for spot effects**

All three complete with swivel joint, switch, socket, clamp and cord ... at a fraction of their usual cost. *Shipping Weight 3½ lbs.*
SUGGESTION: 2 #2, 1 #1 photoflood bulbs 86c.

PHOTOFLOOD STAND PLUS TWO REFLECTORS

- **3-section metal stand extends 6'4".**
- **Sturdy, braced legs with rubber tips.**
- **Stand telescopes compactly to only 2 feet.**
- **Positive locking at any desired height.**

$11.00 VALUE **$6.49** COMPLETE

The ideal indoor lighting setup. 22" crossbar, can also be used to hold screen, backgrounds. Two-spun aluminum 10" reflectors (for #1 or #2 photofloods), complete with sockets, switches, 6 cords, ball socket swivel joints, rubber jawed spring clamps. Can be used on cross bar or furniture. *Shipping Weights: Stand 4 lbs.; Reflectors 4 lbs.*

SUGGESTION: 2 #2 photoflood bulbs	$ .86
Extra clamp on bullet with bulb (for semi-spot)	1.79

KING SOL SOLENOID $5.59 ppd.

Assures perfect synch at all speeds with Graphic, Busch, Ciroflex, Rapax, Rollei—the professional way. Instructions for press camera installation supplied—others have mechanic install. **Was $15.00!**

FAN-TYPE BC POCKET FLASH

- **At last, a completely collapsible flash at a down-to-earth price!**
- **Sturdy battery case has built-in test lamp, ejector, accepts standard bayonet bulbs.**
- **6" diameter metal reflector has special pebble finish for maximum reflecting power, instantly telescopes making entire unit a bare 5" x 2".**

$6.95

FREE Elegant zipper-pouch, attachable carry strap.

EXTRA FEATURES. Extension outlet—no other flash under $10.00 has it! Standard shoe, fits on accessory clips. BRACKET, for use on any camera, $1.00. Cord available for all Compur and Kodak synch terminals. For Kine Exakta, Praktiflex FX, Leica M3, Realist, Argus C3, C4, add $1.00. BC battery, lasts for a year, $1.00.
Extension gun, with 15 ft. cord, $3.00, or only $2.49, if bought together with Flash unit.

LOWEST FLASHBULB PRICES EVER

SAVE 30% in case Lots of 120

Nr. 5 or Press 25	net $10.08
SM or SF	net 11.76
Nr. 5B, 25B or 5 Amber	net 12.60
Nr. 6	net 12.60

Flashbulbs are guaranteed 'Two for one'. We prepay postage East of the Mississippi—add 50c for shipments West of Mississippi.

MARSHALL'S make MONEY for YOU!

35-mm today By Bob Schwalberg

FOR THE 8MM & 16MM MOVIE FAN

4 pc FAMOUS MAKE 8mm EDITING OUTFIT $10.95

A value like never before!

SAVE $10.55

Outfit contains Projection Editing Viewer, with bulb, pair of rewinds with brakes, all metal splicer, all ready for simple mounting on board or table (not supplied). Can you afford to pass up such a value? *Sh. Wt. 6 lbs.*

CINE TITLER

REG. $5.95 — For 8mm & 16mm — $3.59

SAVE 40%

Titles add action, provide continuity for your movies! Yet making titles is so simple with the Cine-Titler! Sturdy metal construction. Auxiliary lens for exact focus. Photograph picture postcards, titles of your own design; you can even shoot animated titles—an instruction booklet accompanies every titler. *Shipping Weight 4 lbs.*

If purchased at the same time as Action Viewer, Action or Super-Deluxe Editor

Titler alone $4.64

SUPER DELUXE 8mm EDITOR

$14.95

Same viewer, rewinds as above, but with automatic splicer, plus metal base—a $26.00 5 pc. set. *Sh. Wt. 6 lbs.*

8mm ACTION VIEWER

$17.89 • Projects brilliant 2"x 3" pictures in full action on the built-in groundglass screen—not just one frame at a time, but in continuous motion.

16mm Mod. $18.95

A viewer which makes editing a real pleasure. Operator can adjust focus to his own vision. Easy to thread, scratch-proof, scientific ventilation of lamphousing—really a blessing for movies fans with a limited budget who know they'd have to spend $40.00 and up for a viewer like it! *Sh. Wt. 4 lbs.*

8mm PROJECTION EDITING VIEWER

$6.95

You'll more than ever enjoy edging your movies when you use this neat, all-metal, electric editing viewer. It projects a clear image on the groundglass, makes possible viewing from a comfortable distance. *Shipping Weight 2 lbs.*

8MM 4 PC. ACTION EDITOR

action viewer, dry splicer w. built-in scraper, 1200 ft. cap. rewinds with brakes—all for only $22.50

16MM 4 PC. ACTION EDITOR

same as 8mm model but with 2,000 ft. cap. rewinds $24.95

SALE IN METAL REELS and CANS

8mm	200 ft. sets 6 for	2.98
	400 ft. sets 5 for	2.98
	300 ft. sets 5 for	2.98
16mm	400 ft. sets 5 for	3.49

FREE with each set: 50 ft. Movie Features, worth $1.75.

½" f1.9 NORMAL FOC. MOUNT 8mm LENS

$12.95 PLUS YOUR LENS

Whether you own a Keystone, Revere, Cinemaster, DeJur, B&H Sportster or Companion 8mm camera, you can now trade your normal (12½ or 13 mm) slow f.2.5, 2.8, 3.5 lens for a brand new coated ½" f.1.9 lens with clickstops in one foot to infinity focusing mount! You can still set this lens at 10 feet and use its depth of field like a 'fixed focus', but closeups can be accurately focused and distant shots will be sharper, too. When you bought your new camera, you would have had to pay $25.00 or more extra for such a lens! ½" f.1.9 lens without trade-in $19.95.

Aux. Wideangle Lens, screws into ½" 1.9, makes a 1.9 Wideangle when needed, only $4.95

25 FOOT DOUBLE 8MM COLORFILM $2.69

• PRIVATE BRAND • 100% FRESH • RELIABLE

Available in Daylight (ASA 10) and Tungsten (ASA 16) types. Excellent processing service included. Standard Kodachrome conversion filters may be used! 3 for $6.89. *Shpg. Chgs. one 9c, three 30c.*

15MM F:1.9 BERTHIOT WIDEANGLE for 16MM $12.95

In Standard C Mount—Focusing 1 Ft. (30cm) to Inf.

Made by France's largest lens manufacturer, this fine color-corrected lens covers a 43 degree angle (normal lens covers 27 degrees), would normally sell for four or five times our price! Needless to say—the quantity is limited. *Shipping Charge 15c*

COMBINATION 16MM OFFERS:

15mm F.1.9 Berthiot Wide-Angle + 3" Ctd. Foc. Mt.

f.3.5 Unitel	$29.95
f.2.5 Kinotel	$42.95
f.1.9 Kinotel	$49.95
f.1.8 ultraspeed Unitel	$54.95

C mount lenses fit virtually all 16mm Revere, Keystone, Bolex, B&H cameras.

Matching WA, 3" Tele Objectives for B&H — $4.95 each.

16 MM FILM SPECIALS

All recent government surplus stock, carefully tested

100 ft. rolls Commercial Kodachrome (indoor type), incl. Kodak processing. $5.95; 3 for $15.00.

50 ft. Magazines Super XX, incl. Kodak processing. $2.95; 4 for $10.00.

100 ft. rolls Tri-X, specify sound or silent, without processing. $1.98, 6 for $10.50. *Postage extra!*

CLOSEOUTS FOR 8 MM MOVIE FANS

Save up to 85%. All brand new, in limited quantities.

2X Aux Ctd. Wideangle, for Kodak Model 60, reg. $39.95	$5.95
Leather Everready Case for Revere 88, reg. $9.50	2.95
Economy Editor, simple splicer, viewer, winding facilities, for 8mm, reg. $9.95	3.95
1½" F.3.2 Fixed Focus Telephoto, ctd., fits all Revere, Keystone, DeJur cameras, reg. $12.95	4.95

Postage Extra

FOR THE DARK ROOM

SAVE 50% ENLARGING LENSES

We are proud to present three unusual values in brand new, coated, color-corrected, anastigmatic lenses, specially constructed to give corner to corner sharpness in enlarging—at prices half and less than those you'd expect to pay for such fine lenses. *Ship. Charge 15c*

2" f.3.8, Leica thread, for 35mm	$7.95
3½" f.4.5, clickstops, for 2¼x3¼", 2¼x2¼"	9.95
5¼" f.4.5, clickstops, for 4x5	19.95

ELECTRIC PRINT DRIER $4.89 WITH 12 x 17 FERROTYPE PLATE

Yes, Spiratone does it again! A complete, ready-to-use electric drier, with a capacity of 2, 8x10 or an accordingly larger number of small prints—single-weight or doubleweight, glossy or dull finish—simply constructed, yet as efficient as units costing several times as much. Works on AC or DC. *Sh. Wt. 8 lbs.*

DUO-DRIER, Twinsurface Model with stand, double capacity, incl. 3, 12x17" Ferrotype Plates $8.95

Suggestion: Bottle of Ferrotype Polish 35c. Stainless Steel Squeege Roller 95c

ALL METAL 11 x 14 EASEL

INCLUDING FOOTSWITCH $7.69

- Solid frame guide on 4 sides for proper alignment.
- Spring steel masking bands calibrated in inches and mm.
- Adjustable for all sizes from 1x1" to 12x15".
- White enameled base.

Extra sturdy (net weight 4 lbs.!). Plug enlarger cord into footswitch and you are ready to dodge, vignet and fully control your 'blow-ups'. *Combined Ship. Wt. 6 lbs.*

8x10 Enlarging Easel, same construction as above, with footswitch $4.98

DEVELOPING TANK

ADJ. FOR 35MM, 828, 127, 120, 620, 116, 616. $1.49

Simple bayonet lock for different size adjustments. Vents for quick changing of liquids. Agitating rod. Easy loading in darkroom — other operations in daylight. Easily worth double. Tank with spare reel, $2.39 *Shpg. Wt. 2 lbs.*

If bought with tank

Darkroom Pan Bulb,	59c
4 Stainless Steel Filmclips,	69c
16 oz. Acid-proof funnel,	29c

ENLARGING TIMER

$6.95

60 sec. range, with second markings. Current shuts off automatically at end of desired time interval. Built-in lock holds knob at desired position, until toggle is released. Adjustable stop for repeat exposures. Manual operation for focusing. Enlarger or printer plugs right into receptacle on cord timer. *Shpg. Chge. 30c.*

AUTOTILT PRINT WASHER

All metal 12x15 works in any sink. If bought at same time as any darkroom items of $4.98 and up, only $1 *Shpg. Wt. 2 lbs.*

11x14 TRAYS 3 for $4.19

Made of heavy acid-proof plastic, with reinforced ribs, handy pouring spout. *Shpg. Wt. 5 lbs.* 8x10 Trays 3 for $2.39. *Shpg. Wt. 4 lbs.*

ENLARGER FOCUSING AID

$1.00 A $2.25 value. *Sh. Ch. 15c*

SALE ON BRAND NEW GROUND & POLISHED CONDENSERS

	Sin.	Dbl. Mtd.	Sh. Wt.
2" (35mm)	59c	2.95	½ & 2 lbs.
3" (2¼" sq.)	79c		1 lb.
4½" (2¼x3¼")		4.98	4 lbs.

7 PC. ENLARGER ACCESSORY KIT

REG. $9.98 $3.98

VALUABLE TO BEGINNERS AND ADVANCED AMATEURS

Set contains sturdy footswitch, funnel, pair of print tongs, bottle film cleaner, Enexpo Enlarging Exposure Meter which shows required time for any paper directly on chart, regardless of enlargement size, and Teststrip maker which helps check accurate exposure and shows where to dodge. *Shipping Weight 4 lbs.*

FREE WITH SET: Argee Print Washer, fits faucet, a $3.00 value.

CHANGING BAG

ONE OF THE MOST IMPORTANT "TOOLS" OF ANY PHOTOGRAPHER

Double zippered inner and outer bags, made of the finest cloth, make this bag 100% light proof even in brightest sunlight.

Whether for use in an emergency, with a film torn or pulled off the spool in a 35mm camera, or for reloading cut film holders or for developing film when no darkroom is available ... the changing bag is justly referred to as a "portable darkroom". 17"x16" working space plus elastic sleeves.

All these features at the lowest price a quality changing bag that was ever offered at. *Shipping charge 25c.* $3.95

PROFESSIONAL MODEL: 27"x30" working space, ($11.00 value) *Shipping Charge 50c.* $6.95

10 FT. CABLE RELEASE $4.49

with setscrew and booster spring

A sturdily constructed German cable for remote control work to operate with any Kodak or Compur type shutter. Imagine the many new possibilities this release opens up for you—whether you photograph wild animals, unsuspecting children at play or take a self-portrait, you'll find this release a valuable accessory. (Leica model add 25c.) *Shipping Cost 25c.*

Other long Cable Releases with setscrew:

40" $1.50 — 60" $2.50 — 20 ft. $7.95 — 40 ft. $12.49

for the twin lens reflex camera fan

SAVE 50% ON PARALLAX-CORRECTING CLOSEUP SETS

PLUS 1 (38"-20") Reg. $3.95 $1.98

PLUS 3 (13"-10") Reg. $4.95 $2.49

A 'must' for closeup work with Ciroflex, Graflex 22, Rolleis (3.5) etc. Sets fit your Ser. V filterholders—or we can supply: Slipon $1.00 ea., Bayonet $1.75 ea. *Shpg. Chge. 10c.*

MAGNIFYING HOOD $2.95 PPD.

FOR ALL TWIN LENS REFLEX CAMERAS

Twin magnifier makes possible accurate focusing and composing of entire groundglass image with BOTH EYES and at comfortable distance, while protecting groundglass from glare. Saves eyestrain, helps accuracy, dim light focusing. Instantly removable and collapsible. For Rolleis, Graflex 22, Ricohflex.

COMBINATION OFFER: Magnifying Hood plus Fieldlens $4.50

FIELD LENS $2.00

A SENSATIONAL SPIRATONE EXCLUSIVE WORTH 2½ TIMES AS MUCH

A flat thin Fresnel ring plate which fits over groundglass in your reflex camera, greatly increasing brilliance of viewing image, making the often almost invisibly dark corner image ten times brighter! No installation—just drop fieldlens onto groundglass. Postpaid

For Rollei, Graflex "22", Ciroflex, Ricohflex, Argoflex, etc.

NOW—for the Twin Lens Reflex Fan SPLIT-IMAGE RANGEFINDER

IN FOCUS — OUT OF FOCUS

- For Rolleiflex, Rolleicord, Ciroflex, Graflex 22, Ricohflex.
- Breaks straight lines at an angle until perfect focus is reached.
- Wonderful for poor light focusing.

Rangefinder is built into groundglass which replaces your present groundglass. Complete instructions supplied, simple installation (or your local mechanic can do it at nominal cost). A "must" for the photographer who insists on perfect focus. Reg. $4.95. .... $2.49 PPD.

AUX. TELEPHOTO and WIDEANGLE LENSES

for Rollei (except 2.8), Ciroflex, Graflex 22 $16.95 EA. or $29.95 for set, in double leather case.

35MM ADAPTER FOR ALL TWINLENS REFLEX CAMERAS

Without installation, the Minidapter enables you to use 35mm film in your 120 Rolleiflex, Rolleicord, Ciroflex, Graflex 22, Flektar, etc.—yet, you can change back to your regular size any time you wish. Minidapter comes complete with groundglass mask and separate finder, for vertical and horizontal shots, ready to use .... $9.95 PPD.

Ricohkin 35mm Back for Ricohflex	$8.95
Rolleikin 35mm Back for Rolleiflex	24.95

4" f:4.5 CTD. LENS IN COMPUR RAPID

$14.95 *Ship. Cost 10c*

• 9 speeds from 1 sec. to 1/400, B, cable release socket and built-in zero delay synch for flash and strobe. Diaphragm openings to f:22.

Here is your chance to get a new coated, German-made (Spiratone-Hamburg) lens. Use it on any camera up to 3¼x4¼ (lens is actually designed 2¼x3¼ maximum corner to corner sharpness), for enlarging, adapt it for telephoto work with a 35mm camera, but hurry!

FAMOUS GERMAN WIDEANGLE FOR 4x5"

$24.95 *Shpg. Cost 35c* IN COMPUR-RAPID X-SYNCH SHUTTER

Covers approx. 85 degrees, and one half of the lens can be removed, converting it into telephoto double the original focus length.

Commercial photographers and advanced amateurs alike have waited for just such a buy! Made by Leitmeyr, an old-time German optical manufacturer, the 105mm f.6.8 coated wideangle anastigmat is for the 4x5 press camera owner just "what the doctor ordered". The popular shutter has nine speeds from 1 second to 1/400th and B, and built-in zero (X) flash. Lensboard for Graphic, state model, $2.00.

65mm WIDEANGLE for 2¼ x 3¼ $19.89

• 9 speed Compur Rapid shutter, to 1/500, with X synch for flash and strobe.

Another Leitmeyr-made wideangle lens, 65mm f.6.8, covers about 85 degrees on the 2¼x3¼ negative. Its symmetrical construction permits use of either half of the lens as a 130mm telephoto. Lensboard for Graphic (state model) $2. *Shipping Chg. 25c*

KOILED FLASH CORD $1.98

- Now available for most shutters. *Sh. Chg. 10c*
- Patented coiled cord extends to 3 ft., yet coils up without effort to only 7".

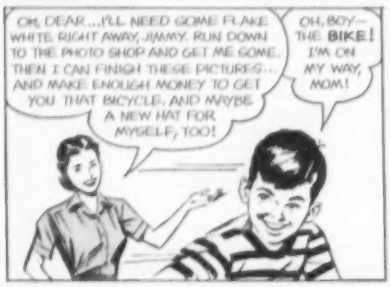
So handy when you want to hold flash away from camera, place electronic flash closer to subject than camera! Available with standard polarized household type plug for Heiland, etc., and prong-type for Kalart to fit Compur, Prontor S, ASA (Kodak), Solenoid, Argus C3, C4, Nikon, Realist, Praktiflex and Exakta synchronized terminals.

All prices include excise tax. Postage and insurance MUST be prepaid, even when no shipping weight is stated — overpayment will be credited in full. Everything listed is brand-new (unless otherwise stated) and fully guaranteed against defects. 25% deposit on C.O.D.'s. Items marked 'Free', 'Premium' or 'Bonus' MUST be requested at time of purchase. Foreign orders welcome — slight extra handling charges apply.

SPIRATONE INC. 49 WEST 27th ST., NEW YORK 1, N. Y.

SEND MAIL ORDERS TO: 135-06 NORTHERN BLVD., DEPT. P8. FLUSHING 54, N. Y.

MARSHALL'S makes MONEY for MOTHER!



By mixing Marshall's Flake White with any of Marshall's transparent oil colors you can paint beautiful "Heavy Oil" backgrounds that give your photo portraits the artistic look of real oil paintings.

The *Marshall* way is the only method in which you control the opacity of your paints at all times.

Sets $1.50 to $13.95 complete, nothing else to buy.

Unless the tube bears this trademark it is not a genuine Marshall Photo-Oil Color. Registered Trademark of the John G. Marshall Mfg. Co. Inc., Brooklyn, N. Y. World leaders in Photo-Oil Colors.

MARSHALL'S
PHOTO-OIL COLORS
the colors the professionals use

- ☐ Send me your FREE booklet "Make Life More Colorful with MARSHALL'S PHOTO-OIL COLORS" FREE
- ☐ MARSHALL'S PHOTO-OIL PENCIL brochure FREE
- ☐ MARSHALL'S PHOTO-OIL COLORING GUIDE. Special section on Heavy Oils $ .25
- ☐ Four different 5x7 photos, just right for coloring $1.00
- ☐ Our most popular set, THE ACADEMY $5.40
- ☐ For the Beginner—THE STUDENT SET $2.95

ALL TAXES PREPAID—MONEY BACK GUARANTEE—C.O.D.'s welcome

Name.....
(Please print plainly)
Address.....
City.....Zone...State.....

Photo Departments Everywhere or Mail Directly to JOHN G. MARSHALL Mfg. Co., Inc. 167 N. Ninth St., Brooklyn 11, New York PH-9

35-mm today

By Bob Schwalberg

The new superspeed lenses—how useful will they be?

Now that miniature-camera speed lenses with maximum apertures ranging from $f/1.4$ to $f/2$ are regarded as commonplace, or at least not as curiosities, it is perhaps inevitable that rumors of even faster lenses with maximum apertures approaching $f/1.0$ are now rife. Two of these rumors have recently materialized in the form of $f/1.1$ and $f/1.2$ superspeed objectives made by three different Japanese manufacturers. Other superspeed lenses from Japan, Germany, and other countries are alleged to be in the offing, and the prospect is arousing great interest within the 35-mm camp.

As an indication of just how amazing and revolutionary such superfast lenses might be, we can point out that the *Photo Miniature*, Vol. XVII, No. 198, for May 1926 refers in passing to ". . . the Ruo anastigmat, with the astounding aperture of $f/1.2$, made by Rudersdorfer." Also, it should be noted, lenses intended for radiography and specialized motion-picture applications have long been available with apertures wider than $f/1.0$. We believe that $f/0.75$ is the record, but maybe not. What is new is the fact that similarly speedy objectives may one day take over where today's speed lenses left off.

Discussion of these new superspeed lenses revolves around their problematical image quality. We made some tests with one $f/1.2$ lens, and the results at full aperture, while not precisely sensational, were surprisingly good. With the great variety of optical glasses available today, and the very large investment of the world-wide optical industry in brains and equipment, there's no real reason to suppose that fairly sharp lenses a full stop faster than the fastest speed lenses available today cannot be produced.

Bigger questions are involved, however. At the risk of being labeled hopelessly reactionary, we'd like to ask just how useful such lenses will really be. Do we need them?

The first point to consider is the factor of increased light transmission. On paper, an $f/1.1$ lens should theoretically pass 60 percent more light than an $f/1.4$. In practice, however, a sort of law of diminishing returns takes over. For example, present-day $f/1.4$ or $f/1.5$ lenses should, mathematically, pass almost exactly 100 percent more light than $f/2$ lenses, or the same lens at $f/2$. Actually, in terms of measurable results, they pass much less than this. At best, the real transmission of $f/1.4$ or $f/1.5$ lenses is only about 50 percent greater than the transmission at $f/2$. The theoretical advantage of one full f-stop is then only one half stop.

If the new superspeed lenses follow this pattern and actually transmit half as much additional light as their mathematical apertures indicate, an $f1.1$ will be just about 30 percent faster than an $f/1.4$ lens. This is a net speed gain of one third of an f-stop. And, because the new superspeed lenses contain many more elements and an increased number of light-absorbing glass-to-air surfaces, they may transmit even less than 30 percent more than an $f/1.4$.

If you'd like to test the proposition that your $f/1.4$ or $f/1.5$ speed lens does not transmit twice as much light wide open than it does when closed down to $f/2$, here's an easy way to check this for yourself. Make a few exposures at full aperture. Then, without changing your shutter speed, camera angle, distance, or other test condition, make some additional exposures at $f/2$ and $f/2.8$. It's a good idea to underexpose these negatives and also to underdevelop them as it is much easier to judge relative densities of thin negatives. Observe the difference in density between the $f/2$ negatives, and call this one full stop difference. Now compare the densities obtained at $f/1.4$ or $f/1.5$ with the $f/2$ negatives. Is this difference anywhere near as great as the difference between $f/2$ and $f/2.8$?

Every time we've run this test with a great many lenses, the best you could say for the density increment at $f/1.4$ or $f/1.5$ is that it's about 50 percent greater. When we tested the $f/1.2$ against its own performance at $f/1.4$ we found only a very slight gain that was considerably less than the 40 percent transmission advantage indicated by the theoretical mathematical gain.

Getting back to our hypothetical $f/1.1$, whose practical speed advantage we've estimated to be about 30 percent, just how valuable is this gain? If you're thinking in terms of color photography, it's plenty valuable. The fastest color film for indoor available-light photography is still good old Type A Kodachrome, which is rated at ASA 16. A speed gain of ½ of a stop here would mean a great deal. And even the fast new daylight Ektachrome and Anscochrome color films rated at ASA 32, and pushable to about 128, could frequently gain by a speed increase of 30 percent via the lens.

But for black-and-white photographs, even in the most abysmal available-light situations such as that proverbial black cat in the coal bin, we doubt very seriously that the third of an f-stop advantage will outweigh a number of important disadvantages.

This doubt stems from our belief that in black-and-white it is almost always preferable to take a 30 percent speed gain from the developer rather than from the lens. One reason for this, obviously, is reduced depth of field. However, in simple justice to the superspeed lenses, we must admit that this is a rather weak argument. If we compare the depth-of-field characteristics of a 50-mm $f/1.4$ with those of a 50-mm $f/1.1$ it becomes apparent that the $f/1.1$'s depth characteristics are not really very much worse than those

The Stackpoles take

of the $f/1.4$. For example, at six feet the $f/1.1$ is limited to a total depth of only three inches while the $f/1.4$ gives all of

for superb results IN ALL FIELDS

ZEISS IKON

Made in West Germany

Contax

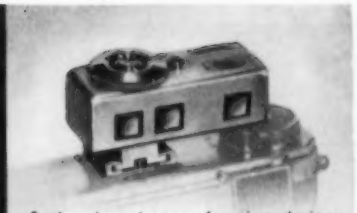
You'll fall in love with a Contax the very first time you operate its smooth, precision-crafted controls. And when you actually start shooting and see the splendid pictures you obtain, you'll prize the optical and mechanical superiority of this famous camera.

You have at your command ZEISS lenses and accessories that cover virtually every field.

The Contax *all-metal* shutter, with speeds up to 1/1250 sec., is practically silent and *remains dependable* in sub-zero cold and tropical heat. . . . Sighting and focusing through one eye-piece. . . . The range-finder is housed in the camera body and has a *long-base solid prism* which insures lasting accuracy. . . . The Contax Model III-a has a built-in photoelectric exposure meter that gives fast, accurate readings in even the poorest light.

At leading dealers. Write for literature.

CARL ZEISS, INC., 485 Fifth Avenue, New York 17



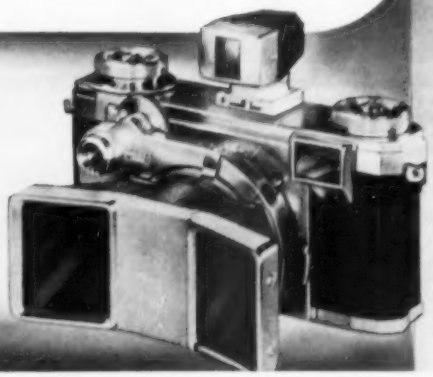
Contameter close-up focusing device. Enables you to take pictures instantly with the camera hand-held at 8", 12" and 20". Parallax corrected. Complete with three supplementary lenses.

Panflex reflex attachment and extension tubes permit magnifying subject up to 10x. Field of view and focus may be viewed up to moment of exposure. Image is right-side-up, unreversed.

Reproduction stand for professional and amateur use. Can be clamped to table or drawing board. Focusing head has built-in Tessar f/3.5, 50 mm lens which can be used from infinity to 8".

NEW STEREO ATTACHMENT

Interchangeable with all other Contax lenses in the bayonet mount, and coupled to the range-finder. Proxar lenses permit close-up stereo pictures as near as 8".



Zeiss Winkel microscope attachment. Has beam-splitting reflecting prism, focusing eye-piece and adapters for all standard microscopes.

The Stackpoles take their Canons (Serial Nos. 78291 & 77576) on an Underwater Vacation

When Peter and Hebe Stackpole vacation, they often spend much of their holiday underwater, for they are the nation's most enthusiastic underwater-photography couple! And quite naturally, they take their Canon cameras with them, because Canon is ideally suited to even this unusual photographic task. Whether exploring the ocean's sub-surface, or up among the outer strata of earth, Canon's simplicity of controls, and complete versatility, make it the professional's No. 1 choice!

The unusually wide angle of view and edge-to-edge sharpness of the Canon 28mm f:3.5 are most appreciated underwater . . . because the water itself acts as a lens, cutting the normal lens angle down.

Pete is an old hand underwater, having made some of the first watertight housings. This is Pete's latest, shown with his Canon in operating position. All controls are accessible from the outside, providing him with all the maneuverability of the land-lubber's camera. It wouldn't surprise us if he designs a housing to change film underwater, too!

Here Pete is artistically framed by undersea wreckage . . . an underwater "candid" by Park Breck of Bermuda.

Here's a friend of the Stackpoles in a miniature diving helmet, playfully feeding some underwater acquaintances by hand. It's like living inside a goldfish bowl! This shot was made by Hebe, who is shown at the right with her camera rig.

Peter and Hebe Stackpole are among the many serious camera enthusiasts who have chosen Canon. Whatever your particular pursuit of photography . . . the exacting precision of the professional . . . or the demanding versatility of the amateur, Canon is a sound choice. Write for our free booklet, "Canon Means Versatility." It's "must" reading for the serious picture-taker!

The Canon System of Photography

Canon Sales Co., Inc. • 67 Wall Street • New York 5, N. Y.

of the f/1.4. For example, at six feet the f/1.1 is limited to a total depth of only three inches while the f/1.4 gives all of four inches. At three feet the f/1.1 has a depth of 0.41 inches against the f/1.4's magnificent 0.86. All of this adds up to mighty close focusing if you want sharp pictures whether you're shooting at f/1.4 or at f/1.1.

Assuming that the superspeed lenses can be made well enough to give adequate sharpness at full aperture, their optimum performance will most probably be achieved at a point on the diaphragm somewhere between the third and the fourth f-stops between f/2 and f/2.8. At the very wide apertures from f/1.4 to f/1.1 or f/1.2 image quality will slide downhill very largely because of the need for extreme accuracy in making exposures at these lens apertures.

Limited depth of field at wide lens openings is demonstrated by blurred Dave Garroway and sharp Nancy Berg. 50-mm f/1.4 Nikkor.

This need for pin-point high-aperture exposure accuracy is important lest we inadvertently destroy image sharpness. At very high apertures speed lenses tend to have markedly less contrast, even though their resolution is in most cases quite good. Sharpness, of course, depends as much upon contrast as it does upon resolution. In flat lighting the loss of detail contrast caused by as little as one half of a stop overexposure at f/1.4 or f/1.5 is enough to greatly injure negative sharpness. At f/2 or f/2.8 it's possible to overexpose considerably without disastrously harming the crisp, sharp quality of detail lying in the less fully exposed areas of the negative. But at f/1.4 or f/1.1 a similar overexposure will frequently ruin a picture. What happens is that the fine detail which is actually resolved by the lens becomes blanketed with a layer of extraneous density resembling fog. Interestingly enough, this loss of crispness does not present any appreciable problem with color films, particularly not with Kodachrome.

Based upon our experience with many brands of present-day speed lenses we honestly believe that these big apertures demand a slight degree of underexposure (compensated for by an equivalent increase in development), if they are to perform at their best. This need for exposure accuracy is probably greater with the new superspeed lenses when used wide open. Even before the advent of Tri-X led to the rediscovery of the wonder of shooting at f/2.8 and f/4, very few of the professional available-light guys we know ever used anything faster than

(*Continued on page* 114)

Abe Cohen's

OUR GREATEST VALUE GIVING SALE IN 75 YEARS!

WILLOUGHBY "SPECTACULARS"

Best-sellers at the World's Largest Camera Store. Exceptional values that are in consistent demand from customers the world over. All recommended and guaranteed by Willoughbys. Order with confidence. Use in complete satisfaction.

FED-FLASH Camera Outfit

Camera, Reg. 8.40
Flash, Reg. 2.95
VALUE 11.35

SALE 5.95

8 pictures on #127 film, and they can be enlarged beautifully. Clear, sharp lens. Customers are buying not only for themselves, but as gifts for all occasions . . . including Christmas.

Willoughbys Greatest TRIPOD SALE

Famous PROFILE #141 TRIPOD

List Price 22.50 **SALE 12.95**

Now you can own one of the world's finest tripods for less than the price of an ordinary tripod. All-precision made of the best, lightweight, channel-construction aluminum . . . and you know what that means. Exquisitely finished, and especially treated to withstand wear and the elements. 3-inch wide platform holds any type of camera. Positive lock. Retractable rubber tips, and sharp points, plus additional sharp tips for low angle use. Three sections; extend to 60¾ inches; collapse to 25 inches. Weighs 3 lbs., 7 ounces.

PROFILE CENTER POST

SALE 6.95

Adjustable to any height. Adds about 20 inches to PROFILE #141.

PROFILE TRIPOD HEAD

SALE 8.95

2⅜ x 3½ inches. Built-in spirit level. Convenient, long handle.

"SAFE-O-LOCK" Projector Stand

SPECIAL 16.95

Accommodates slide or movie projectors. Sets up in a second. Won't slip or slide.

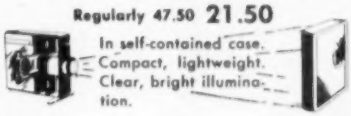
Bertram "CHROLON" Exposure Meter

Regularly 22.50 NOW 12.50

Super-sensitive photo-electric cell. Large, easy-to-read dial. Speeds 1/600th to 4 minutes. For color or black-and-white . . . still or movie.

FAFIX 35mm Slide Projector

Regularly 47.50 **21.50**



In self-contained case. Compact, lightweight. Clear, bright illumination.

2 x 2 METAL SLIDE FILE

2.95 Value **1.89**

Holds 150 glass slides or 300 cardboard slides. Attractive finish. Shipping wt. 4 lbs.

UNIVERSAL Variable FIELD FINDER

List 35.50 **19.50**

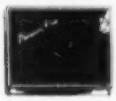
For use with Contax, Canon, Leica, Nikon and similar type 35mm cameras. Zoom-type finder with parallax control. Shows proper field for the following lenses: 35mm, 50mm, 75mm, 85mm, 100mm, 180mm and 200mm.

SAVE 60.00! BRAND NEW! 35mm PRAKTICA FX

List 139.50 **79.50**

Famous single lens reflex with Zeiss Tessar f/2.8 lens. Pre-set diaphragm.

LOOSE LEAF ALBUM



Regularly 3.95 **1.50**

Attractive leatherette cover, gold tooled. 10½ x 12½ inches. Soon you'll be putting your summer pictures in an album . . . buy now and save.

GENUINE LEATHER GADGET BAGS

Zipper top. Outside pocket. Comfortable shoulder strap.

7"x9"x4¼" #10 Reg. 6.95 **NOW 4.65**
8½"x10½"x4" #11 Reg. 8.95 **NOW 5.95**
10"x12"x5" #12 Reg. 11.95 **NOW 7.95**

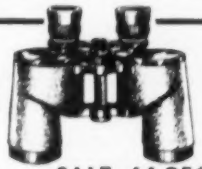
STAINLESS STEEL TRAYS

3.95 Value **1.95**

8 x 10 inches. Last a lifetime.

MAIL ORDERS FILLED — ADD POSTAGE

Quality Prism BINOCULAR SALE!



CADILLAC-7x35 SALE 44.95*
High precision binoculars with individual focusing eye piece. Beautiful leather case.

BINOLUX-7x50 SALE 29.95*
Central focusing, plus individual right-ocular adjustment. With genuine pigskin case.

BINOLUX-6x30 SALE 19.95*
You'll be surprised at the quality for the money. Individual focusing. Complete with case.

*Plus 10% Federal Excise Tax

OPEN 8:30 TO 6 — THURSDAY TO 8

WILLOUGHBYS

110 West 32nd St. • 113 West 31st St.
New York 1, N. Y. • LOngacre 4-1600

IT COSTS NO MORE AT THE WORLD'S LARGEST CAMERA STORE — COME IN AND SEE FOR YOURSELF

Abe Cohen's Exchange

OUR GREATEST VALUE GIVING SALE IN 75 YEARS!
THE PHOTOGRAPHIC ITEM YOU WANT IS HERE AT

Spectacular Savings!

CHOOSE FROM THE WORLD'S FINEST CAMERAS, PROJECTORS, ENLARGERS, PHOTO ACCESSORIES AND BINOCULARS

LOWEST PRICES EVER ON BRAND NEW FAMOUS 35mm CAMERAS

EXA 35mm SINGLE LENS REFLEX OUTFIT
List Price 139.15
Equipped with 2 lenses, 50mm Westar F2.8 and 100mm Westar F4.5 telephoto. Built in FX synchro flash, focal plane shutter, speeds to 1/500. With case. **99.50**

PRAKTICA 35mm FX S.L. REFLEX
List Price 139.50
50mm Tessar F2.8 preset lens, synchro flash for flash or strobe, focal plane shutter, speeds to 1/500, automatic film transport and shutter cocking. **79.00**

ILOCA QUICK 11A 35mm CAMERA
List Price 89.50
Color Corrected Ilitar F3.5 lens. Coupled range and viewfinder, Prontor SV-MX full synchro shutter, speeds to 1/200. **37.95**
7.50 Pentax Finder **5.00**

ILOCA QUICK "A" 35mm CAMERA
List Price 39.95
Color corrected F3.5 lens, Vero-flash synchro shutter, double exposure preventer, speeds to 1/200, film counter, cable release socket, focusing ring. **22.50**

AUTO. EXAKTA VX 35mm S.L. REFLEX
List Price 392.00
Zeiss Biotar F2, preset lens, Penta prism and range finder, synchro for flash or strobe, speeds to 1/1000, film transport and shutter cocking. **239.00**
12.50 Everoady Case **10.00**

DITTO "99" 35mm RAPID SEQUENCE
List Price 99.00
Full frame sequence camera, F2.8 lens, built-in flash synchro including strobe sequence, focal plane shutter, speeds to 1/1000, interchangeable lenses. **49.50**
45.00 Tele Lens 105mm, F6.3, W/Frame Viewer . . . **33.50**
35.00 Wide Angle Lens F3.5 . . . **27.50**
8.50 Everoady Carrying Case . . . **6.50**

CERTO SUPER DOLLINA II CAMERA
List Price 129.50
Heligon F2 lens in flash synchro MX shutter, speeds to 1/500, coupled range and viewfinder, double exposure preventer, auto. film & shutter cocking. **69.50**
9.95 Everoady Carrying Case . . . **7.50**

ILOCA 11A 35mm STEREO CAMERA
List Price 125.00
Matched F3.5 lenses, flash synchro shutter, speeds to 1/300, film counter, delayed action release. **62.50**
12.50 Carrying Case **8.50**
7.50 Pentax Finder **5.00**

ZEISS IKON "IKOFLEX 1A" TWIN LENS REFLEX CAMERA
With F3.5 Coated Lens
Super Value!
76.00

- Automatic Film Winding
- Picture Size 2¼ x 2¼
- Prontor SV-XM Synchro Shutter
- Double Safety Locking Device • Body Release
- Speeds to 1/300
- Built in Magnifier and Eye Level Sport Finder

LOWEST PRICES EVER ON BRAND NEW SLIDE PROJECTORS

S.V.E. AUTOMATIC 300-WATT SLIDE PROJECTOR
List Price 74.90
5" F3.5 lens, Airequipt automatic slide changer, blower cooled, 2x2 35mm slide carrier. **46.75**

MANSFIELD DELUXE 300-WATT SLIDE PROJECTOR
List Price 45.00
5" F3.5 lens, blower cooled, 2x2 35mm slide carrier. Complete with carrying case. **27.95**

AUTOMATIC 300-WATT SLIDE PROJECTOR
List Price 59.95
5" F4 color corrected lens, Airequipt automatic slide changer, blower cooled, 2x2 35mm slide carrier. Complete with carrying case. **38.50**

LOWEST PRICES EVER ON BRAND NEW PRISM BINOCULARS

Finest Quality Imported "Megaphos" or "Selsi" High Powered Prism Binoculars

6x15 Independent Focus	Now Only 11.95
7x18 Independent Focus	Now Only 19.50
7x35 Zeiss Type I.F.	Now Only 21.95
7x35 Bausch & Lomb Type, C.F.	Now Only 26.95
8x25 Independent Focus	Now Only 15.95
7x50 Independent Focus	Now Only 24.50
7x50 Central Focus	Now Only 28.50
8x30 Central Focus	Now Only 22.50
8x40 Bausch & Lomb Type, C.F.	Now Only 34.50

Prices Include Leather Carrying Case
Add 10% Federal Excise Tax

LOWEST PRICES EVER ON BRAND NEW FAMOUS FLASH CAMERAS

VOIGTLANDER BESSA I CAMERA
List Price 94.95
Skopar F3.5 lens, Compur rapid synchro shutter, speeds to 1/400, picture size 2¼x3¼. **49.50**

VOIGTLANDER BESSA II CAMERA
List Price 124.50
Skopar F3.5 lens, built-in range finder, Compur rapid synchro shutter, speeds to 1/400, picture size 2¼x3¼. **74.50**

VOIGTLANDER VITO II CAMERA
List Price 54.50
Skopar F3.5 lens, Prontor SVS-3X shutter, speeds to 1/300, built-in flash synchro, double exposure preventer. Like New **34.50**
Leather Case *List 8.50* **6.75**

BIGGEST TRADE-IN ALLOWANCE FOR YOUR OLD EQUIPMENT!
Write for Quotations!

LOWEST PRICES EVER ON BRAND NEW FEDERAL ENLARGERS

Model 135C, F4.5 Lens—List 49.95	37.49
Model 135C Carrying Case—List 7.25	5.44
FOR 2¼x3¼ NEGATIVES	
Model 240, Diffused F7.9—List 24.95	18.75
Model 269, Diffused F6.3—List 39.75	30.49
Model 279C, Diffused F6.3—List 46.95	35.19
Models 269-279 Carrying Case—List 7.25	5.44
Model 269CL—Cold Light, F6.3—List 53.00	40.50
Model 311C—Condenser, F4.5—List 69.25	51.94
Model 315CL—Cold Light, F4.5—List 80.00	59.75
FOR 4x5 NEGATIVES	
No. 450—Diffused, F4.5 Lens—List 109.50	81.95
No. 470DC—Diffused, F4.5 Lens—List 129.50	97.13

LOWEST PRICES EVER ON BRAND NEW MOVIE EQUIPMENT

LIFETIME GUARANTEED 8mm KEYSTONE MOVIE CAMERAS
List Price 50.95
F2.8 coated lens, 3-speeds, footage indicator, easy drop-in loading, self movie lock, brilliant optical viewfinder. New 1955 model, discontinued. **34.95**
With F1.9 Lens List 78.00 **47.50**

LIFETIME GUARANTEED 8mm 500-WATT PROJECTOR
Orig. List Price 99.50
F1.6 coated lens, blower cooled, 400-ft. reel capacity, variable rheostat speed control, spring powered tilter, fast re-wind, AC-DC motor. Complete with carrying case. **69.95**

RADIANT TRIPOD SCREENS

50x50—List 21.50	14.95	40x40—List 15.95	8.95
30x40—List 13.75	7.95	37x50—List 19.25	12.95

TREMENDOUS SAVINGS ON NEW LENSES FOR EVERY TYPE CAMERA!

NEW COATED LENSES FOR KINE EXACTA CAMERAS

40mm Schneider, F4.5 Lens	29.50
40mm Heliopian, F4.5 Lens	37.50
80mm Z. Biometer, F2.8 Pre.	64.90
75mm Zeiss Biotar, F1.5	99.00
90mm Sun, F4. Lens	27.50
90mm Sun, F4. Preset Lens	34.50
135mm Tele Colinar F3.5 Pre.	54.50
135mm Albinar, F4.5 Lens	29.95
135mm Sun, F3.5 Preset Lens	42.50
135mm Travenar, F3.5 Auto	49.50
135mm Culminar, F4.5 Lens	34.50
180mm Tele Picon, F5.5 Lens	47.50
250mm Tele Picon, F5.5 Lens	79.50

NEW COATED LENSES FOR PRAKTICA, PENTACON, CONTAX S-D

35mm Lithagon, F4.5 Lens	47.50
105mm Telepar, Westar F4.5	29.50
90mm Sun, F4. Lens	27.50
90mm Sun, F4. Preset Lens	34.50
135mm Travenar F4.5	32.50
75mm Z. Biotar, F1.5 Pre.	99.50
180mm Tele-Picon, F5.5 Pre.	47.50
180mm Schneider, F5.5 Lens	72.50
135mm Sun, F2.8 Preset Lens	42.50
85mm Culminar, F2.8 Lens	49.50

CARL ZEISS TESSAR COATED LENSES IN COMPUR RAPID SHUTTER

10.5cm F4.5 Full Synchro	65.00
10.5cm F3.5 Full Synchro	85.00
13.5cm F4.5 Full Synchro	90.00
15cm F4.5 Full Synchro	99.00
13.5cm F6.3 X Synchro	55.00
21cm F6.3 MX Synchro	132.00
15cm F3.5 X Synchro	165.00

BRAND NEW MOVIE LENSES

3" Kinotel 16mm F1.9 in Focusing "C" Mount. List 49.95	34.50
3" Elitar 16mm F3.5 Telephoto Coated Lens in Focusing "C" Mount. List 32.50	22.50
1½" Elitar 8mm F1.4 Coated Lens for Kodak Magazine Mount. List 54.95	34.50
1½" Elitar 8mm F1.4 Coated in Focusing "D" Mount. List 49.50	29.50
1½" Kinotel 8mm F1.5 Coated in Focusing "D" Mount. List 42.50	24.50
1½" Elitar 8mm F1.9 Coated in Focusing "D" Mount. List 38.95	26.50
6.5mm Elitar 8mm F1.9 Wide Angle Coated for Kodak Magazine. List 50.00	33.50
1½" Kinotel 8mm F2. Coated in Focusing "D" Mount. List 29.95	19.95

NEW GERMAN "PRIZE" EXPOSURE METER
Direct Reading. With Case **9.95**
NEW "PRIZE" DELUXE EXPOSURE METER
Extremely Sensitive. With Case **14.95**

GERMAN EXCELSIOR POCKET TRIPODS
Brand New! Lightweight, Flat, Compact. Deere Aluminum Inner Tubes, Aluminum Elexed Outer Tubes. Black Ribbed Permanent Coating.
MODEL 7L-7 SECTIONS *List 10.95*
Closed 9½", Extended 46" **5.95**
MODEL 10L-10 SECTIONS *List 12.95*
Closed 8", Extended 46" **6.95**
3.50 Leather Cases for Tripods 1.95

NEW "KAM-RA" SERVICE BAG
Leather. Russet Glow or Golden Wheat
Size 9½"x7½"x4½", *List 20.00* **8.95**
Size 11½"x8½"x4½", *List 22.50* **10.95**

BIG SAVINGS ON ACCESSORIES

ENLARGING EASELS

Airequipt 4-way Easel—List 8.07	6.05
Sunray 8x10 Adjustable—List 4.95	3.72
Sunray 11x14 Adjustable—List 6.95	5.22
Saunders 14x17 Adjustable—List 25.00	18.75
Dialmaster 14x17, Adjustable Airequipt Easel—List 17.06	12.80

35MM SLIDE VIEWERS

Brumberger Table Viewer, Electric, AC-DC, 2x2 and 2¼x2¼—List 6.50	4.88
Arcadia—Self-Lighting Pocket Stereo Viewer—List 5.95	4.47
Brumberger Stereo Viewer—List 9.95	7.52
Arcadia Deluxe Battery Operated Viewer—List 5.95	4.47
Guild Adj. Stereo 3-D Viewer—List 1.95	1.47
Zadix Royal Viewer w/Illumin.—List 7.45	5.50

AUTOMATIC TIMERS

Gralab #165 Standard Electric Timer Minutes, Seconds with Alarm—List 21.95	16.47
Gralab #168 Timer, Same as #165 with Luminous Dial—List 22.95	17.22

SLIDE FILE BOXES

2x2 Metal Slide File, Capacity 150 Glass, 300 Cardboard—List 2.95	2.12
Brumberger #1116 Stereo Slide File, Cap. 150 Glass, 300 Cardboard—List 6.50	4.88
Brumberger #1115 Stereo Slide File, 2-Tiers, Holds Viewer, 115 Glass and 230 Cardboard—List 6.50	4.88
Brumberger #1111 Slide File-Stereo, Holds Viewer, 50 Glass, 125 Cardboard—List 3.95	2.95

PREMIER TRIMMERS WITH GUIDES

8" List 6.00	4.39	15" List 17.00	12.75
10" List 6.85	4.99	18" List 23.25	17.95
12" List 8.90	6.49		

MISCELLANEOUS ACCESSORIES

Brumberger 8x10 Paper Safe, All Metal Big 7" Shelves—List 10.95	8.22
Brumberger 5x7 Con. Printer—List 22.00	16.50
Airequipt Photocraft 4x5 All Metal Printer—List 14.34	11.78
4x5 Changing Bags, 2-Zippers—List 4.50	3.38
Ace 8x10 Hard Rubber Trays. Complete set of 3—List 5.25	3.94
11x14 Hard Rubber Tray—List 3.65	2.74
8x10 Stainless Steel Tray—List 3.25	2.44
Static Master Brush (1")—List 4.95	3.74
Static Master Brush (3")—List 12.50	9.38
Yankee Speedomatic Tank, Roll Film—List 3.90	2.93
Yankee 4x5 Adj. Cut Film—List 7.95	5.97

All Equipment Sold With 15 Day FREE Trial, Full Money Back Guarantee. When Ordering Add Estimated Shipping Costs . . . Overage, If Any, Will Be Refunded. 10% Deposit Required with C.O.D. Orders. All Advertised Merchandise Subject to Prior Sale!

ABE COHEN'S EXCHANGE, INC.

"THE HOUSE OF PHOTOGRAPHIC VALUES"

142 FULTON STREET • NEW YORK 38, N. Y.

legal problems in photography

—by Charles Kell with a Sylvania Press 25; at f/11 and 1/250

You're right on the nose

with Sylvania Flashbulbs

That bug-eyed "What's this" expression was caught at just the right instant by a "Blue Dot" flashbulb.

Sylvania Flashbulbs, manufactured with the most exacting precision, fire instantly . . . reach and hold their rated light-peak with split-second accuracy. That's why they are first choice with amateurs and professionals alike . . . *outsell all other brands combined.*

Always look for the "Blue Dot" and the name Sylvania before buying. They're your guarantee of sure-firing performance.

Look for the Blue Dot
. . . it pays off in finer flash pictures

SYLVANIA ELECTRIC PRODUCTS INC., 1740 Broadway, New York 19, N. Y.

LIGHTING • RADIO • ELECTRONICS • TELEVISION • ATOMIC ENERGY

In Canada: Sylvania Electric (Canada) Ltd., University Tower Bldg., Montreal

SYLVANIA®...fastest growing name in sight!

legal problems in photography

By George Chernoff and Hershel B. Sarbin
Members of the Bar of the State of New York

Libel by Photograph

LIBEL BY PHOTOGRAPH is a problem that is closer to both amateur and professional photographers than they generally realize.

It is also a problem that has captured the interest of some of our readers in recent months, for there have been a number of questions about the subject in our mail.

We were recently told by a photographer that a picture cannot possibly be libelous (at least if it has not been doctored), since a picture tells the truth and the truth cannot be a libel. He was wrong on the first count, and not entirely right on the second.

First, we all know that pictures do not always tell the truth. Optical illusions are sometimes created by the camera just as they are by the human eye—a point that was made quite clear by a very interesting case in the Federal Courts some years ago.

The plaintiff was a widely known gentleman steeplechaser whose picture was used in connection with an endorsement for Camel cigarettes. Plaintiff had posed for the picture in question willingly, and had been paid for his testimonial. He did not, however, see the photograph before it was actually used. By a quirk of lighting, the picture showed the horseman with his hand under the pommel, and the side girth fell loosely in such a way that it seemed to be attached to the plaintiff's middle rather than to the saddle. Looked at in this way the photograph became, in the words of the Court, "grotesque, monstrous and obscene"; and the legend under the photograph which said: "Get A Lift With A Camel" reinforced the ribald interpretation.

The Court recognized that an optical illusion had been created and that the photograph carried "its correction on its face as much as though it were a verbal utterance which expressly declared it was false * * *." Nevertheless, the Court said, the picture exposed the plaintiff to overwhelming ridicule. It made of the plaintiff a preposterous, ridiculous spectacle, and the obvious mistake only added to the amusement. The Court added that "had such a picture been deliberately reproduced, surely every right-minded person would agree that he would have had a genuine grievance, and the effect is the same whether it is deliberate or not."

As to the plaintiff's having consented to the use of the photographs for which he posed for an advertisement, the Court ruled that this was not a consent to the use of an offending photograph. The plaintiff had no reason to anticipate that the lens would so distort his appearance. The Court would not fix upon the plaintiff the responsibility for whatever the camera might turn out, as long as he did not see and approve the picture before publication.

While the case of the steeplechaser may seem a bit unusual on its facts, the Court's decision in the case rests on certain basic elements in the law of libel, which all photographers should understand.

A libel, as it is defined in the law dictionaries, is "that which is written or printed, and published, calculated to injure the reputation of another by bringing him into ridicule, hatred, or contempt."

While truth is generally regarded as an absolute defense to libel, there are some jurisdictions which hold that even truth is not a defense if the libel was malicious. Here are some typical examples of statements that have been held libelous by the Courts. It is a libel to say that a man is insane, or that he has an infectious disease, or that he is illegitimate, or that he is guilty of a crime, or that a woman was served with a summons in her bathtub.

To avoid any possible confusion, we should also point out that in many instances other than where truth is relied on as a defense, the publisher of a false and defamatory statement has the privilege to do so. For example, Congressmen have an absolute privilege in a speech or debate in either House; and newspapers may report statements made in legislative or judicial proceedings, provided the report is fair and accurate. There are other privileges but they are not important to our discussion at this time.

Applying the basic principles of libel to photography, the Courts have rightfully said that a man may be held up as an object of ridicule, contempt, or hatred by means of a picture, just as he can by words.

You may have noted in the definition of the term "libel" that publication is required. This does not mean that only pictures which appear in magazines or newspapers can be libelous. The term "publication" is far broader than this and includes all types of display. Thus, if a photographer places one of his prints in a showcase in front of his studio or shows the picture to people other than the subject, he has "published" that print. Mere possession of a print is not publication. The distinction is important.

One area in which photographers must exercise caution involves the captions placed on pictures, for a perfectly harmless photograph can be made libelous by an improper caption. The photograph of the steeplechaser did not require a caption to make it libelous. But here are some cases where captions caused the trouble. In one instance the words "Fatty Arbuckle's Lady Love" were printed below the picture of the plaintiff. The publication was held libelous, for the plaintiff was a married woman and the combination of picture and caption held her

Let Your Eyes and Ears be the Judge

up to disgrace. The Court said that the combination imputed an illicit relation-

SAVE at PENN!

15 DAY MONEY BACK TRIAL—One Year FREE Service! All items offered subject to prior sale. Please estimate and add shipping and insurance costs. We'll refund every penny not used. If you prefer C.O.D., please send 10% deposit with order. Prices are subject to change without notice.

Save $280

8mm SOUND PROJECTOR and RECORDER

$169.50

Brand New, Latest Model

ADD MUSIC, VOICES, SOUND EFFECTS. Penn gives you a sensational $450 value—a quality 8mm sound projector with a built-in recorder. Lets you quickly, easily, inexpensively add sound to your old and new 8mm films. Fully guaranteed. **• Brilliant 750-watt lamp • 1" f/1.6 lens • Professional size 1600-ft. reel capacity gives you up to 4 hours of uninterrupted projection • Lightweight • Compactly built into one single carrying case • Input jacks for microphone, phonograph and headphone monitor • Volume and tone controls • Can be used as P.A. system for narration or background music while projecting • Two speeds—records at 24 f.p.s. or 18 f.p.s. • 115-volt AC • All the features of an expensive tape recording unit.**

Manufactured by the makers of the world famous Movie Mite Projector, this **Movie Sound 8** is nationally advertised and sold for **$449. PENN Camera** gives you this entire unit at a price you would probably expect to pay for a comparable silent projector—**only $169.50, complete with microphone,** in the original factory cases.

AMAZING PENN OFFER!

SAVE $60

Latest 1955 Model

CROWN FLEXARET IIIa

with **new** fully synchronized Prontor **S.V.S.** Shutter

• Fabulous 2¼ x 2¼ reflex buy • 80mm f3.5 ctd. 4 Element anastigmat lens resolves 2000 lines per inch • Speeds from 1 to 1/300 sec. and B • Ctd. anastigmat f3 viewfinder lens for brilliant ground glass focusing • Sports Finder • Full-view magnifier • Self-Timer • Automatic crank-lever film transport and exposure counter •

$110 Value SPECIAL **$49.50** Eveready Leather Case . . . $6.95

Gets the action every time because it's MOTORIZED

Save $150 • Brand New

ROBOT Star

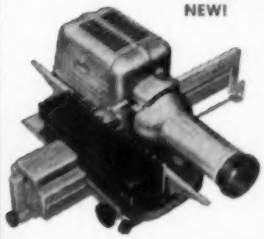
W/Schneider Xenon f1.9 ctd. interchangeable lens

Set the Robot-Star just once, and you're all set for as many as 24 exposures, made singly or in rapid-fire sequence, as fast as 5 per second! Robot-Star automatically moves film and resets shutter after each exposure. Takes all B&W and color 35mm STANDARD film cartridges. Economic picture size (1" x 1") permits 55 exposures on a normal 36 exp. cartridge.

Reg. $249.50 **SPECIAL $99.50**

Eveready Leather Case $9.95

BRAND NEW!



SAVE $23

VIEWLEX

2 x 2 *Automatic* Slide Projector with Change-O-Matic

300 Watt, motor fan cooled projector with 5" Luxtar ctd. lens. Takes all 2 x 2 slides in any type mount or binder, intermixed. Reg. $67

SPECIAL $44

Deluxe comb. case when ordered with above projector . . . $10.50

with standard carrier (instead of Change-O-Matic) $39.95

Save over 43% on Brand New

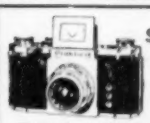
FAMOUS DIAXETTE

35mm CAMERA

Reg. $49.70

$26.95 w/case

• Precision f2.8 ctd. lens • Pronto to 1/200 sec. & B • All Metal • Automatic film transport & shutter set • Body release • Dbl. exp. prev. • Uses standard 35mm film.



Save $60

Brand New

PRAKTICA FX

35mm Reflex

W/3 Pt. Front Full Synch.

Focal Plane Shutter • Interchangeable lens feature • Fully synchronized for Flash & Elec. Flash • Reflex Eye Level Finder & Magnifier • Automatic Shutter Cocking & Film Transport • Factory Registration.

Tessar f2.8 Ctd. Preset . . . **$79.50**

Primoplan f1.9 Preset, Ctd. **$79.50**

Eveready Leather Case . . . $6.95

100mm. f4.5 ctd. TELEPHOTO lens. Reg. $34.95 . . . SPECIAL $17.95

Eye level Prism Finder for above —Spec. $13.50

DARKROOM VENTILATORS

Remove chemical odors and provide a constant flow of fresh air. Absolutely light tight, silent, easy to install. Single blower moves 90 cu. ft. per min. Dbl. blower moves 185 cu. ft. per min.

Reg. 14.95

AC Sgl. Blower . . . $11.50

Reg. 21.50

AC Dbl. Blower . . . $16.95

Brand New! Standard Double

CUT FILM HOLDER

Fits all Graphics and other cameras with standard press-type Spring Backs.

	Reg.	Spec.
2¼x3¼	$3.85	$2.79
3¼x4¼	3.99	2.89
4x5	4.12	2.99
5x7	4.71	3.39

Minimum Order—3 Holders

SAVE ON BRAND NEW

PICON LENSES

1955 models just received!

These famous lenses imported exclusively for Penn from West Germany are available to fit: Kine Exakta, Exa, Varex, Pentacon, Contax S, Contax D, Hexacon, Verikon, FX-35, Praktiflex-FX, Praktica-FX, Grantica.

All lenses are coated and all (except 40mm) have pre-set diaphragms.

	Reg.	SPEC.
40mm f4.5	$50.00	$24.95
85mm f2.0	124.50	82.95
100mm f2.8	69.95	46.65
135mm f3.5	74.95	49.95
180mm f5.5	79.95	53.30
250mm f5.5	124.50	82.95

Latest Model

SPOT-O-MATIC

Enlarging Meter

Model 6A—Twice as Sensitive

In one easy reading, the SPOT-O-lmates test strips, spoiled paper contrast, exposure time, and eliminates test strips, spoiled paper and guesswork.

SPECIAL PRICE $9.45

BRAND NEW

Reg. $335

KINE EXAKTA VX

With original CARL ZEISS BIOTAR Preset f2 ctd. lens.

Cpld. film transport, shutter cocking and frame counter • Full Synch. • Factory Guarantee, Import Certificate and Registration.

PENN SPECIAL $199 Disc. Model

Eveready Leather Case $9.50

BRAND **NEW** for Kine Exakta

RANGE-FINDER PRISM

Eye level view-finder and automatic split image range-finder. Complete with extra ground glass and case

$88 Value SPECIAL **$37.50**

Range-Finder Glass Only $12.75

SAVE $110 BRAND NEW *Registered*

PENTACON

with fully automatic ctd. f2 Westagon lens

• 35mm single-lens reflex • Prismatic eye-level viewfinder • Focal plane shutter with speeds from 1 to 1/1000 sec. plus bulb • Interchangeable lenses • Self-timer • Built-in synch. for flash and electronic flash • Automatic shutter set.

Reg. $259.50 **SPECIAL $149.50**

with Registration Certificate and full one-year Factory Guarantee.

Genuine Leather Eveready Case . . . . . $ 9.75

105mm f4.5 ctd. Telephoto Lens. Reg. $34.95 . . . . . $17.95

Just out! All new

DAVIDSON Star-D COMET

with revolutionary Swing-Over Head

The newest and most advanced elevating Tripod in photography. The new Swing-Over Head allows instant framing in any horizontal or vertical angle, or any intermediate point in the arc.

Designed to precision standards, the new Comet has Multi-Cam head, Dual Controls, and Synchrobock lifting mechanism. With double extension, three section legs, the Comet opens to 72 inches and folds to 27 inches.

Introductory Price $22.50

with a $5.95 vinyl case FREE

ALL FILM FACTORY SEALED

Kodak & Ansco 35mm Fresh BULK FILM

Tri-X, Super-XX, Plus-X, Ultra Speed, Supreme

	Reg.	SPEC.
35mmx27½ ft.	$2.15	$1.60
35mmx50 ft.*	3.50	2.60
35mmx100 ft.	6.00	4.45

*Kodak Only.

Specify type—Only in lots of 3 or more.

FRESH KODAK FILM PACKS

LATE 1955-56 DATING

Tri-X, Super-XX Plus-X

	Reg.	SPEC.
2¼x3¼	$1.95	$1.42
3¼x4¼	2.60	1.89
9x12 cm.	2.70	1.97
4x5	2.95	2.15

Specify type—Only in lots of 6 or more.

KODACHROME

LATE 1955-56 DATE

Kodak Processing Included

	Reg.	SPECIAL Each
8mm Roll (dble)	$3.75	$2.93
8mm Mag. (dble)	4.65	3.62
16mmx100' Roll	10.40	8.12
16mm Mag.	6.95	5.41
35mmx20 exp.	3.25	2.55
35mmx36 exp.	4.95	3.87
35mm Stereo (20 exp.)	4.65	3.64
#828	1.85	1.45
Bolex 8mmx100' Roll	13.60	10.70

Specify Daylight or Indoor.

Only in Lots of 3 or more.

BRAND NEW, FRESH HIGH SPEED—ASA 32 EKTACHROME

LATE 1955-56 DATING

NO PROCESSING—SPECIFY DAYLIGHT OR INDOORS

	Reg.	SPEC.
35mm x 20 exp*	$1.85	$1.45
#828—Bantam*	1.00	.79
120 or 620*	1.25	.98
35mm x 100 ft.	40.00	31.25

* Only in lots of 6 or more.

POLE TRIPOD

NEW with Adjustable Center Post

- **Aluminum and Chromed Steel** Reg. $17.35
- **Strut-Brace Leg Supports**
- **Reversible Tips**
- **Extends to 52"** SPEC. **$5.95**

MAIL ORDERS PROMPTLY FILLED

PENN CAMERA

LOngacre 4-2230

Dept. P-955, 126 W. 32nd St. New York 1, N. Y.

FAMOUS FOR FAIRNESS

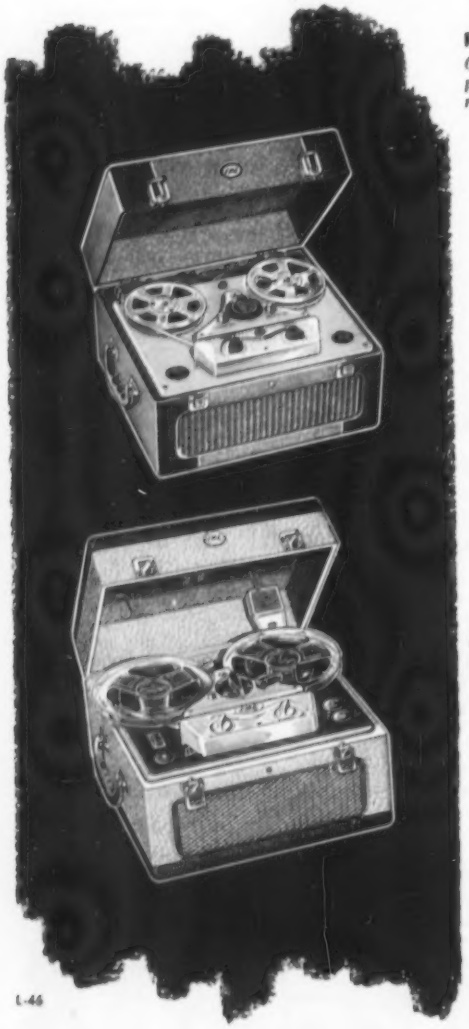
Send for PENN'S FREE Photo Materials Catalogue Big Bargain Book!

We Invite Your Inquiries on *any* Photographic Equipment.

Let Your Eyes and Ears be the Judge

FME tape recorders are America's Greatest Values

You don't have to spend a lot of money to own a superior tape recorder. These two FME Tape Recorders give you *the greatest number of desirable features available at popular prices.* FME Tape Recorders are precision instruments made and guaranteed by the makers of world-renowned Federal Photographic Enlargers.



L-46

FME Model 37-C $139.95

Complete with ceramic microphone, reel of tape and take-up reel, detachable power cord.

- **50-12000 CPS**
- **3¾ and 7½ IPS**
- **Dual track system**
- **Single knob control**
- **Less than 0.5% wow**
- **Separate volume and tone controls**
- **Fast forward and rewind**
- **Radio-phono input jack**
- **Instant stop editing lever**
- **External speaker jack**
- **New ceramic microphone**
- **Straight in-line threading**
- **Recording level indicator**
- **Power pilot light**
- **Erase safety lock**
- **3 hour maximum play time***
- **Accessories available: patch cord, foot control, bass reflex speaker, microphone mixer**

FME Model 47-A $159.50

Complete with ceramic microphone, reel of tape, take-up reel, detachable power cord, patch cord.

Has all the features of the 37-C plus:

- **Reversible automatic counter**
- **Additional output jack for monitoring or Hi-Fi amplification**
- **Special selector lever for fast switch from fast forward to pause to play and record**
- **$3.50 patch cord included**

*With new thin tape

At Photo, Hi-Fi and Radio-Television Stores

FEDERAL MANUFACTURING & ENGINEERING CORPORATION

Photographic and Electronic Instruments

213 STEUBEN STREET BROOKLYN 5, NEW YORK

up to disgrace. The Court said that the combination imputed an illicit relationship between the plaintiff and the comedian. The same result was reached where a picture of the one-time wrestling champion Zbyszko was captioned "Stanislaus Zbyszko, Wrestler, Not Fundamentally Different From The Gorilla In Physique." The wrestler's picture was placed next to that of a gorilla.

Another interesting example of this problem occurred several years ago when a midwestern newspaper published the photographs of four schoolboys under the banner heading: "Slain School Girl Vanished with Someone in Cadillac." Immediately below these pictures, in small type, was the further explanation: "These four acquaintances of murdered Patricia Birmingham are co-operating with police in seeking clues that may lead to the girl's slayer." This was followed by the names and addresses of the boys.

Five or six lines below these pictures, in type five to six times larger than that in the line immediately below the photographs, was a two-column subhead: "Four Youths Held. 60 to 70 Friends Face Grilling." The boys brought an action for libel and the Court held that it was a question of fact whether the photographs, captions, and heads combined were capable of conveying the meaning that the four boys were the boys held on suspicion of murder. In other words, the question was one for the jury.

The authors of the legal column regret that each specific question submitted by readers cannot be answered directly in the column. The questions are used, however, as the basis for columns on a particular subject and, wherever possible, the authors do send a reply directly to the reader. Because your letters help them to decide what subjects you wish to have covered in the column, the authors invite your questions and your suggestions on the contents of future articles.

Almost all cases that will arise in this area of the law of libel involve (like the case just cited) questions of fact for the jury to decide. It therefore is wise for the photographer to examine the captions on his photographs carefully, and to avoid those which might seem clever but could possibly hold the subject up to ridicule.

Limitation of space prevents us from covering all aspects of the libel problem applicable to photographers in this month's column. We will discuss the subject further in future issues.—

We are celebrating an achievement. Supreme now has 150,000 satisfied customers. Let us satisfy you too!

SUPREME'S giant celebration SALE!

TOP QUALITY • LOWEST PRICES • SPEEDY DELIVERY

ALL POSITIVE REASONS WHY SUPREME IS YOUR BEST BUY!

(SALE PRICES IN EFFECT UNTIL SEPTEMBER 10th, 1955)

EVERYTHING YOU BUY IS GUARANTEED TO SATISFY!

120 620 ROLL FILM

WORLD'S BEST BUY! 10 rolls 2.29

SUPER XX OR INFRARED 20 rolls 4.29

EKTACHROME Daylight

For Terrific Color Shots!

Weston 32 • ASA 40

120 / 620: 3 rolls 2.25; 6 rolls 4.25

35mm x 20 Exp.: 4 for 3.25; 8 for 6.00

(Processing not included)

Processing of 120, 620 or 35mm (with mounting) 1.00

Spooled from bulk stock of Aero Ektachrome

35mm x 100' FRESH, SAFETY

Plus X, Super XX, Infrared, Ansco Supreme, Bkgrd. X: 2.50 Each; 3 for 7.00

LOADED IN DAYLIGHT

LOADING SPOOLS IN METAL CANS!

Bulk loader only 4.95, if ordered with above

Tri-X (1956) Fresh quality guaranteed 4.95

Ansco Color—1956 Date DAYLIGHT OR TUNGSTEN 35mm x 20 Exposures — 6 for 5.50

Reloaded in metal cartridges

FRESH ANSCO COLOR 35mm x 50' Tung. 6 cartridges free! — 7.75

35mm AERO EKTACHROME Daylight, Weston 32

35mm x 25' 3.75
35mm x 50' 7.25
35mm x 75' 9.95

6 empty cartridges—FREE!

ANSCO COLOR DAYLIGHT

Factory fresh 1956 dated

35mm x 28' BULK FILM

6.95 each — 3 for 18.95 (Tongued & frame numbered)

SPECIAL 35mm Combination Offer

- 35mm daylight bulk loader
- 12 empty cartridges
- One roll 35mmx100' (250 ASA film)
- One-gallon size of Microdol

all for only 7.50

SOVEREIGN SUPER-SPEED PANCHROMATIC MOVIE FILM

Fresh 1956 Date—160 ASA

8mm x 25' dbl. ..... 3 for 6.50
16mm x 100' ..... 3 for 15.00

FREE PROCESSING INCLUDED

8mm & 16mm 1956 Date

McGregor Brand **Natural COLOR Film**

ASA Outdoor 10

8mm x 25' Dbl. Roll. 3 for 8.00
16mm x 100' Roll... 3 for 18.95
35mm x 20 exp. .... 3 for 5.75

Free processing by McGregor

IT'S HERE NOW . . .

Available for immediate delivery!

AERO ENLARGING PAPER

9⅜"x200' #1, 2 & 3 (wt. 18 lbs.) 2 ROLLS 7.25

Packed in vacuum sealed cans. Quantity prices on request.

CUT FILM

4 x 5

Super Pan Port. Ortho-X, Triple-S Ortho, Triple-S Pan, Comm'l Ortho — 75 sheets 4.25

4x5 (1955)

Ansco Color Day. or Tung. — 20 sheets 5.25

8 x 10

Comm'l Ortho, Commercial, Super XX Pan, Triple-S Ortho, Super Pan Press — 75 sheets 8.25

Process Film, Contr. Proc. Pan — 75 sheets 5.95

Ektachrome Type B or Ansco Color, Day. or Tung. — 10 sheets 5.95

FINEST QUALITY SOVEREIGN B & W MOVIE FILM

8mm & 16mm — 1956 Date — ASA 50

8mm x 25' Dbl. 3 for 3.75 — 6 for 7.25

16mm x 50' Mag. 3 for 6.75 — 6 for 13.00

16mm x 100' Roll each 3.00 — 3 for 8.50

FREE PROCESSING INCLUDED

16MM B&W FILM

50' Mag. Super XX or Plus-X 3 for 6.95
100' Roll Plus X ..... 3 for 8.50

FREE PROCESSING INCLUDED

50' Roll Infrared ..... 3 for 1.50
50' Mag. Plus-X Neg. Super XX Neg. ..... 3 for 3.50
25' Roll Ansco Hypan Rev. ..... 10 for 1.95
50' Roll Ansco Hypan Rev. ..... 10 for 4.25
100' Roll Plus-X Neg. Super XX Neg., Bkgrd.-X... 3 for 3.25
200' Roll Super XX Neg. ..... 3 for 5.75
400' Roll XX-Neg. ..... 2 for 6.50

(Processing not included unless specified)

GUARANTEED ENLARGING PAPER

SIZE	TYPE	CONTR.	QUAN.	Price
3x5	DWSM	#2, 3	200 sh.	2.25
5x7	DWSM	#2, 3	200 sh.	4.25
5x7	DWGL	#1	200 sh.	2.95
8x10	SWGL	Varigam	100 sh.	3.75
8x10	SWGL	#1, 2, 4	100 sh.	3.50
8x10	SWGL	#1, 3	125 sh.	4.00
8x10	DWSM	#2, 3	100 sh.	3.75
8x10	DW Cr. Wh. Lustre	#1, 2, 3, 4	100 sh.	3.95
8x10	DW Brov. Vel.	#1, 2, 3, 4	125 sh.	4.95
8x10	SW Resisto Rapid	#1, 3	125 sh.	4.00
8x10	DWSM	#1	200 sh.	3.95
10x10	SWSG	Varigam	125 sh.	4.00
11x14	DW Wh. Lustre	#1, 3, 4	100 sh.	6.75
11x14	SWSM	Varigam	50 sh.	3.75

FILM PACKS

2¼ x 3¼ Plus-X 6 for 5.50 . . 12 for 10.50
4 x 5 Super-XX 3 for 3.75 . . . . 6 for 7.25

Guaranteed AERIAL FILM — Aerial Photographers save money here!

5¼"x20' Aero Ektachrome with chemicals 9.95
5¼"x20' Super XX, Triple-S-Pan 1.50
5¼"x20' Infrared 1.50
5½"x26' Super XX or Tri-X 1.75
5½"x56' Super XX or Tri-X 2.50
5½"x100' Super XX or Tri-X 5.50
7"x18' Super XX or Tri-X 1.75
7"x18' Aero Ektachrome, compl. kit with chemicals 9.95
7"x125' Super XX or Tri-X 7.50
7"x125' Triple-S-Pan 7.95
9½"x75' Super XX 9.25
9½"x75' Triple-S-Pan 9.25
9½"x75' Infrared 4.50
9½"x125' Tri-X 9.95
9½"x200' Super XX or Tri-X 18.75
9½"x200' Triple-S-Pan 16.50
9½"x390' Super XX or Tri-X 39.50
9½"x390' Triple-S-Pan 38.50

Each roll in original, individual metal container

ENLARGING ROLLS 40" x 30'

Ansco Brovira SWGL #1, 2, 3 ..... 8.50 ea.
Kodabromide DW F5, G5, E4 ..... 5.50 ea.
Bromide Resisto Rapid SW #1, 2 ..... 6.95 ea.

CONTACT PAPER

guaranteed quality

SIZE	TYPE	CONTR.	QUAN.	PRICE
1⅞x2¾	SWGL	#1, 2, 3, 4	1,000 sh.	2.25
4x5	SWGL	#2, 3, 4	300 sh.	2.50
8x10	DWSM	#1, 2, 3	100 sh.	2.50
8x10	Ad-type	#1, 2, 3, 4	250 sh.	3.50
10x10	SWGL	#2, 3, 4	100 sh.	2.50
10x10	DWSGL	#2, 3	250 sh.	4.75
10x20	DWSGL	#2, 4	100 sh.	4.75
20x24	SWSGL	#1, 2, 3, 4	100 sh.	5.75

PLUS-X BANTAM 828 15 for 2.00 • 30 for 3.00

14 x 17 DEVELOPING TRAYS

White porcelain coated, Wt. 8 lbs. each 3.95 each . . . . set of 3 for 10.95

MICROFILE

35mm x 36 exposures Original factory packed carts. 6 for 2.49

PLEASE INCLUDE POSTAGE

Include 25% on C.O.D. shipment. Note: orders without postage will be sent shipping charges collect. Unless otherwise noted, merchandise listed above is outdated U. S. Surplus but guaranteed good. Export & wholesale inquiries invited. WRITE FOR FREE, VALUE-PACKED BULLETIN, JUST OUT!

SUPREME PHOTO SUPPLY CO.

11 BROADWAY, Dept. P, NEW YORK 4, N.Y.

candid shots by the Editors

Another Single-Subject Issue

Last month we devoted our entire issue to aspects and problems of 35-mm photography. This month, convinced of the usefulness of such one-subject issues, we bring you another—on color. To illustrate it properly, we have quadrupled our normal quota of color pages, and set up the presses so that the color could be scattered throughout the magazine. Every feature article in the issue pertains to color, and almost every one has its own full-color illustrations. You'll find a hundred new color picture-taking ideas in these pages, and as many technical tips. Don't miss *any* of the Color Issue!

Your Annual Is Ready

After more than a half year of preparation the 1956 edition of Photography Annual is ready for distribution. Publication date is August 25. This year the Editors solicited material from nearly 5,000 photographers in all parts of the world; the response was much heavier than ever before, and the job of making a final selection to fill the 250-page book was prodigious. The Annual continues to be the world's biggest dollar's worth of fine photographs, and we're confident you will agree that this year it's better than ever. Herewith, as a teaser: a group of postage-stamp reproductions of some pictures you will see in full page size in the Annual.

1956 Annual: a peep-show preview.

Like Something for Nothing?

There's always an attraction in getting something for nothing, or for very little money. Manufacturers and distributors of photographic equipment are generous with helpful literature about their own products and about ways in which they can be used. Popular Photography, beginning this month, offers a list of 117 of these free or low-cost books, booklets, pamphlets, brochures, and other aids that can be yours on request. If you're planning to buy a new camera or other equipment, or if you'd like to know more about specific tools and techniques, be sure to check the list. You'll find it—along with a handy coupon for ordering what you want—on page 123 of this issue.

Transatlantic Affair

Columnists are widely supposed to hold the power of life, love, and death over their readers. Well, our man Whit Hillyer (Camera Clubs) runs true to form, at least to a degree. A couple of years ago an Englishman named Alan Simpson wrote to Whit, saying he'd like to correspond with U. S. photo enthusiasts. Soon he was overwhelmed with mail, and was forced to limit his letter-writing; in fact, he limited it exclusively to one correspondent, Miss Pearl Taenzer of the Cream City Color Camera Club in Milwaukee. A short time later, Miss Taenzer visited England; still later, Mr. Simpson came to Milwaukee to live, and took out U. S. citizenship papers. Finally (of course) last spring they were married. The happy couple gives all credit to Columnist Hillyer. And Whit in turn ascribes it all to his old typewriter.

Quarter-Century of Flash

If you're a real veteran in photography, you can probably remember when there was no such thing as a flashbulb. To be precise, that would have been before August 1, 1930, the date when General Electric introduced its first bulb, the G-E No. 20. It was a bulky, unwieldy object, judged by comparison with today's midget bulbs, but it was a tremendous advance in convenience over flash powder. In the beginning flashbulbs (like flash powder) were used only for open-flash exposures, for the aluminum foil burned very quickly and brilliantly in its oxygen-filled bulb. But improvements were not long in coming, and soon after the advent of the PH/20, sports and news photographers began trying to synchronize the flash with their shutters. Flash duration grew longer; the filament was fine-drawn wire, then shredded foil, and synchronization became surer and more widely useful, until today . . . well, everybody knows about flashbulbs today. The prototype bulb was a German invention, by one Johannes Ostermeier. General Electric bought American patent rights, and put it through an extensive program of development at Lamp Division headquarters in Nela Park, Cleveland, before putting the PH/20 on the market.

First flashbulb: G-E's PH/20.

People, Places, and Things

Wilson Hicks, former executive editor of *Life* and author of the unique and valuable book *Words and Pictures*, will teach a course in photojournalism beginning this fall at the University of Miami, Florida. Emphasis will be on what Hicks calls "the mentals of photography," and "practice in basic seeing," rather than only on the mechanics of the camera and photographic processes. To his own broad background in the field, he will add the wisdom of visiting experts. . . .

Polaroid picture-in-a-minute photography has found its place in U. S. Civil Defense procedure. In Omaha, a camera store made Polaroid Land cameras available to CD officials during an early-summer test evacuation of that city, to prove its usefulness in emergencies. Camera club members took pictures of various phases of the operation and rushed them to a central headquarters. . . .

Wayne Miller, having finished a two-year job as assistant to Edward Steichen in preparing the *Family of Man* exhibition, and having done all the photographs for a book called *A Baby's First Year* (in collaboration with famed pediatrician Benjamin Spock and Dr. John Reinhart), has moved back to the West Coast (Orinda, Calif.) and set himself up again as a free-lance photographer. . . . —

You get seven different speeds

With Bolex cameras you shoot movies at speeds from ultra-slow to extra-fast – 8 to 64 frames-per-second. Bolex 8 mm cameras are ideal for sports and action films.

You'll use an optical zoom viewfinder

On the Bolex an optical viewfinder uses moving lenses to show precisely what you are filming. No calculations or use of masks, no lines on finder – you shoot what you see.

Instant stop protects your films

Bolex cameras stop instantly on rundown. With Bolex, film transport speed is perfectly even right up to the last frame – no change of speed to spoil film exposure or movement.

You can shoot single frames

Bolex comes with single frame device – and with a cable release. You can shoot titles, animation, cartoons, and scientific movies with the Bolex B-8 and C-8.

You'll like the easy loading

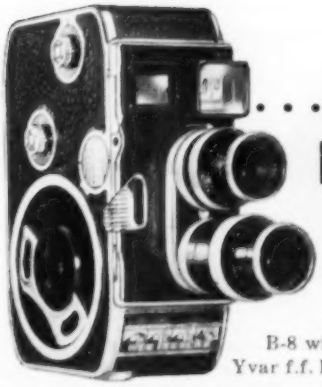
Bolex B-8 and C-8 (identical except for turrets) load with greater ease than a box camera. Drop in loading can be done even with gloves on; precision gate removes for cleaning in a flash.

Swiss craftsmanship gives better films

Bolex cameras are made in the heart of the Swiss watchmaking country by Paillard. Bolex cameras have built-in quality giving steady, brilliant films.

You know you have extras, too

With Bolex, you get extras: genuine Morocco leather covering, ratchet winding, leather wrist-strap, near-the-eye geared footage counter, D mount, plus many other features.



. . . . . *you get all this with* . . . . . .

BOLEX

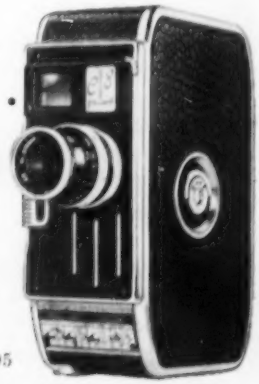
8 mm MOVIE CAMERAS

from

$89.95

B-8 with F:2.5
Yvar f.f. lens: $119.50

C-8 with F:2.5
Lytar f.f. lens: $89.95



PAILLARD PRODUCTS, INC., 100 Sixth Avenue, New York 13, N. Y. • *Fine Swiss mechanisms since 1814*

in design and precision

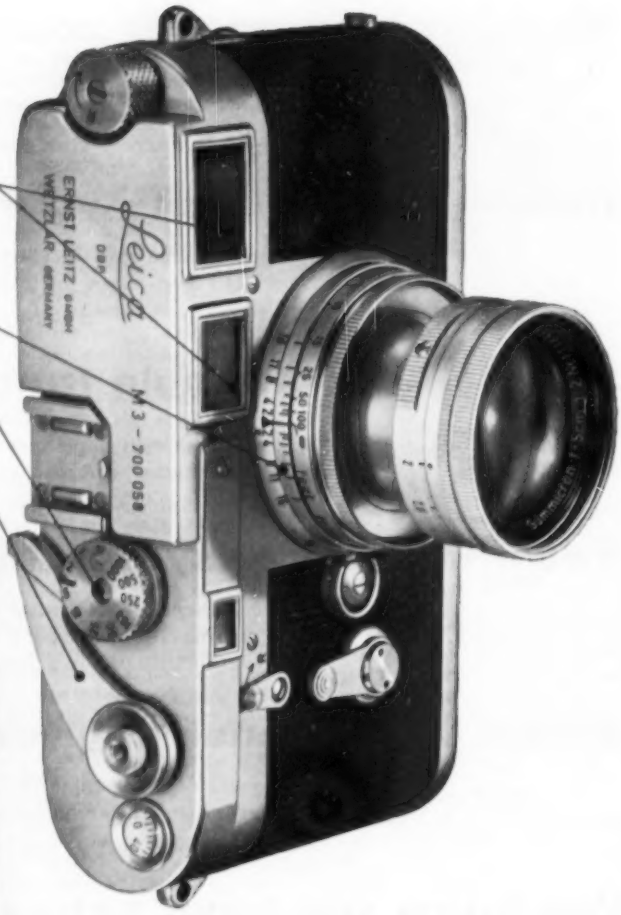
there's nothing like a LEICA

Bright-line frame outlines exact field of view. Frame changes automatically with insertion of different lenses. Automatic parallax correction for all lenses.

Precision bayonet quick-change mount for complete range of interchangeable lenses, combines speed and convenience of bayonet mount with safety and rigidity of thread mount. Thread mount LEICA lenses can be used, with proper adapters.

Shutter speed dial with click stops from 1 to 1/1000th sec. and Bulb.

Lever for rapid film advance and simultaneous cocking of shutter—prevents double exposures.



Life-size viewfinder and rangefinder combined in one large viewing window.

Two flash outlets (back of camera) provide full and automatic synchronization for flash bulbs and electronic flash.

Exposure meter with extreme sensitivity range couples directly to shutter speed dial for quick, automatic settings.

These are just a few of the many outstanding features of the new LEICA M-3.

The 35mm LEICA M-3 is the world's most advanced camera. Made by the manufacturers of famous Leitz microscopes, it represents a unique achievement in camera craftsmanship. Let your LEICA dealer show you the many automatic features that make it the world's most advanced camera.

NEW Leica M-3

lifetime investment in perfect photography

E. LEITZ, INC., 468 FOURTH AVENUE, NEW YORK 16, N. Y.
Distributors of the world-famous products of Ernst Leitz, Wetzlar, Germany
LENSES • CAMERAS • MICROSCOPES • BINOCULARS

07659

COLOR

A Popular Photography special issue

THIS SPECIAL ISSUE of Popular Photography is in a sense a preview of tomorrow's photographic magazines. It is devoted almost entirely to color, and color, according to the prophets, is expected to take over in the near future. The late Joe Dombroff, president of Willoughbys in New York, said early this year that black-and-white photography would be obsolete within the next two and a half years. That was a pretty sweeping prophecy, and although based on both known and surmised advances in color materials and techniques, it probably failed to take into account the extraordinary genius and durability of black-and-white, which in less than a century and a quarter, has established itself as an important creative medium.

Although many accomplished photographers look upon it with disdain, color *is* moving ahead in popularity with phenomenal speed. The 35-mm still camera, 8- and 16-mm movies, as well as stereo in conjunction with hand viewers and projectors, have provided the mechanisms for what is nothing short of a boom in color photography. The manufacturers of the film are furnishing the fuel, and the fuel is developing higher octane as time goes on. This year both Eastman Kodak and Ansco brought out new color films with speed ratings that, with normal development, have caught up with some of the moderate-speed black-and-white emulsions, and soared into the high-speed category with forced development.

With fast color films of wider latitude already here, all that is missing now is a practical, high-quality, inexpensive color printing paper, which would give the photographer the control he needs for creative work. Once quality color printing gets within range of the average amateur darkroom, the color millenium will have arrived. When that day comes (and it is as inevitable as color television) every issue of Popular Photography, which has been leading with more color pages than any other photographic magazine, will be devoted almost entirely to color.

Meanwhile, everybody is having a whale of a good time with color, and this special issue is designed to help you improve your slides and have an even more wonderful time.

—Bruce Downes, Editor.

Why color?

IN VIEW of the pictures on these pages the sensible question would be, "Why black-and-white?" Certainly, either way, the pictures answer the question. We live in a world of color in which the colors fade as the sun sets. Color is totally absent only in darkness —and in black-and-white photographs.

Thus color and black-and-white photography are so unlike each other that they should not even be compared. Such comparisons, though, are interesting and can be rewarding experiences. The answer is never the same. Sometimes a color photograph of a given subject is superior to its counterpart in black-and-white. Sometimes (and more often) the reverse is true.

In color photography the image produced is closer to reality than is black-and-white, and this in itself can rob a color photograph of the charm we often find in a fine black-and-white in which the image, being in tones of gray, is far removed from the world around us. It is the inherent unreality of the monochrome image that often fascinates us, while a successful color photograph sometimes captivates us by the experience of intensified reality it affords. Surely the two versions of Mario Garettoni's iridescent aquarium leave no doubt about which is superior. In this case it is the iridescent colors which fascinate us, and these have, of course, vanished in the black-and-white version, leaving nothing but a few interesting reflections and an anemic goldfish.

The moral to all this is that although color film is exciting and wonderful to use, it isn't always the best choice. The wise photographer is a careful observer, who makes certain that the color in the subject he is about to photograph is important enough to warrant the use of color film. He asks himself questions: Will color add to or detract from the idea I want to get across? Are the colors harmonious, or will they clash and so spoil the picture? Would the mood I want to convey be better served with black-and-white, which I can control?

Being a color photographer is more than just putting color film in your camera. It is a whole new way of life.

Mario Garettoni, of Rome, Italy, chose Ansco Color film to photograph this aquarium because he was fascinated by the iridescence, without which the black-and-white version is much less interesting. He used a Leica, exposing in hazy sunlight, 1/30, f/4.

Sidewalk studio

interesting. He used a Leica, exposing in hazy sunlight, 1/30, f/4.

The outdoors is a natural setting for informal portraiture, done with a minimum of props and the help of passing strangers

By MURRAY ZINN

I LOVE to take pictures of people, lots of people. I especially like to work out of doors and with strangers. From these preferences was born my sidewalk studio, which perfectly combines the particular needs of my avocation.

Because I find taking pictures of strangers, both adults and children, so fascinating, I take my camera and go scouting for subjects in new neighborhoods. When I find a model, I have no trouble getting him to sit for me. People invariably succumb to the flattering psychology of someone's wanting to take *their* picture. When my prospective models are children, I get permission to photograph them from their parents. With a subject now completely co-operative under the influence of the importance I've given him by asking to take his picture, I'm ready to choose my assistants. Actually, the helpers I select come to me. All I need do is set up my camera with a long-focus lens (an immediate attention-getter), seat my model on a box, and begin to study possible shooting angles. In no time, I'm surrounded by prospective helpers, usually children, who want to know what's going on. It's then just a matter of screening many eager helpers down to four who will help me with my props: two to hold backgrounds, two to hold reflectors. Then we all begin having fun.

"Studio" equipment includes 2 reflectors, 3 blankets, 1 miscellaneous box, owes secret of its success to relaxed informality. Natural, pleasing results are evident in portraits, all made outdoors on Kodachrome Daylight film, on opposite page.

I find that two reflectors, one tinfoil and one 20x28-in. white canvas board, provide me with just enough variations for fill-in light. The tinfoil reflector gives a much stronger reflectance than does the canvas board. They are both held at about a 45-degree angle to my subjects, and about an equal distance away (three to four feet) from the subject's face.

The blankets are extremely convenient as backgrounds; they are light in weight, don't take up much room, and are always ready for use. I have three, all 38x60 inches, in blue, green, and pink. If they become at all wrinkled from packing, it won't show if they are placed about five or six feet in back of the model and I shoot with my lens wide open. For variety in background texture, I have my little assistants move the blanket in closer and pull it taut to create one or two interesting folds. Studio-like portraits can be made as simply as this.

My camera is a Leica with a 135-mm Hektor f/4.5 lens. With this long-focus lens and a camera distance of from five to seven feet, I can fill the entire film frame with my subject's head and shoulders.

Whether the day is bright, hazy, or overcast, pleasing results are possible by using reflectors supplementarily. On a bright day, I usually backlight my subject; if I'm shooting a profile, I let the sun highlight one area on the face, filling in shadows with the reflectors. They can also be used to produce interesting catch-lights in the eyes. On dark days, they are indispensable for adding detail to shadow areas.

I think it's important to use an exposure meter. On a sunny day, I have success with Kodachrome at a setting of 1/100 second at f/4.5; on hazy days, 1/30 second at f/4.5. This can vary slightly; let the meter be your guide.

I don't use a tripod simply because I like the freedom and maneuverability I have when hand holding my camera. This is especially ideal in trying to capture the natural spontaneity of my younger models' fleeting expressions and moods.

I always make it a point to take pictures of my assistants, as well as a few extra shots of my models, get their names and addresses, and send one to each of them to show my appreciation.

For me, shooting portraits outdoors, in this informal manner, is like playing games. Probably that's why it's so easy to get my (*Continued on page* 132)

AFTERNOON: Tranquil autumn scene was shot by Harold E. Berry with Kodak 35, Daylight Kodachrome. Exposure: 1/50 sec. f/6.3.

NIGHT: Joseph Chizmarik's nocturnal view of Manhattan was made on Kodachrome Type A with an exposure of 15 seconds at f/2.

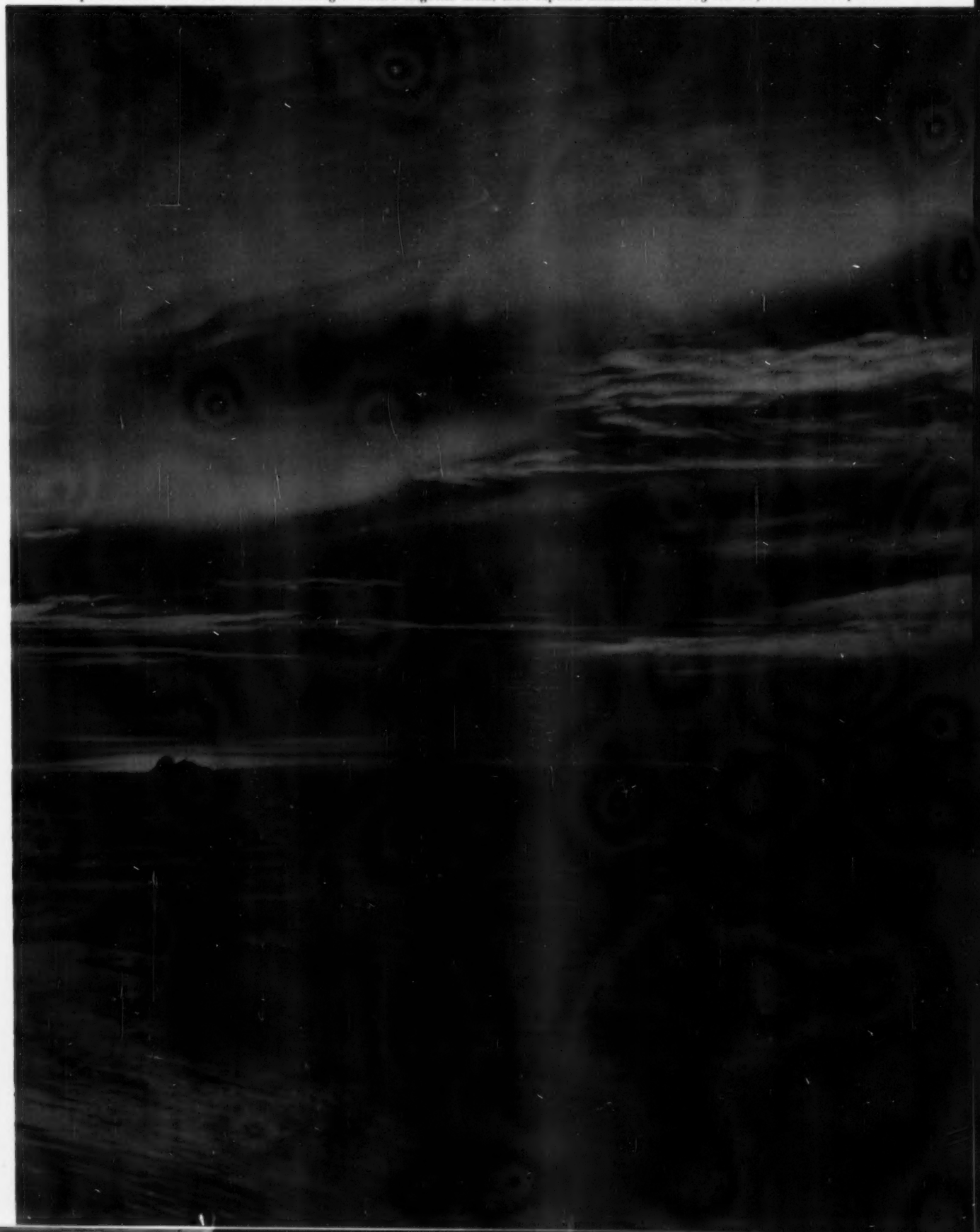
At dawn or dusk, at noonday or midnight, a world of scenic splendor is yours for the taking with color film and any camera

Landscapes around the clock

IF YOU SHOOT COLOR—and who doesn't today—the chances are that sometime soon you'll find a scene so evocative, so beautiful, or so unusual you can't resist capturing it on film. If the result disappoints you, if it seems trite and uninteresting, perhaps the fault lies in the time of day you took the picture. The quality of daylight changes almost constantly as the sun arcs across the sky from dawn's horizon to the west, and the illumination at any time may be right for one landscape but wrong for another. Learn to see light with a more discerning eye: notice the warmth or coolness of its color and the size, shape, direction, and intensity of the shadows. Manufacturers of color film recommend shooting only during the middle hours of the day for most faithful color rendition. They are right, of course, but sometimes the pictorial effect of off-beat colors is far more interesting than high-fidelity color reproduction. So don't be afraid to experiment: try the golden light of early morning, the ruddy glow of afternoon; shoot in the blue twilight when sunset colors still linger in the sky and lights begin to twinkle on; try time exposures in color at night. There are few rules to guide you in these experiments. Remember to increase exposure about one stop more than normal when shooting early in the morning or late in the afternoon. And even if you use a meter it's good practice to bracket your estimated exposure with two additional exposures, one slightly more and one slightly less. A filter sometimes helps, especially a Skylight or its equivalent which removes the excess blue so often found in distant landscapes, mountain views, and marine scenes. You'll probably waste some film, experimenting with landscapes around the clock, but the cost is slight if you achieve pictures as good as the three here.—▶

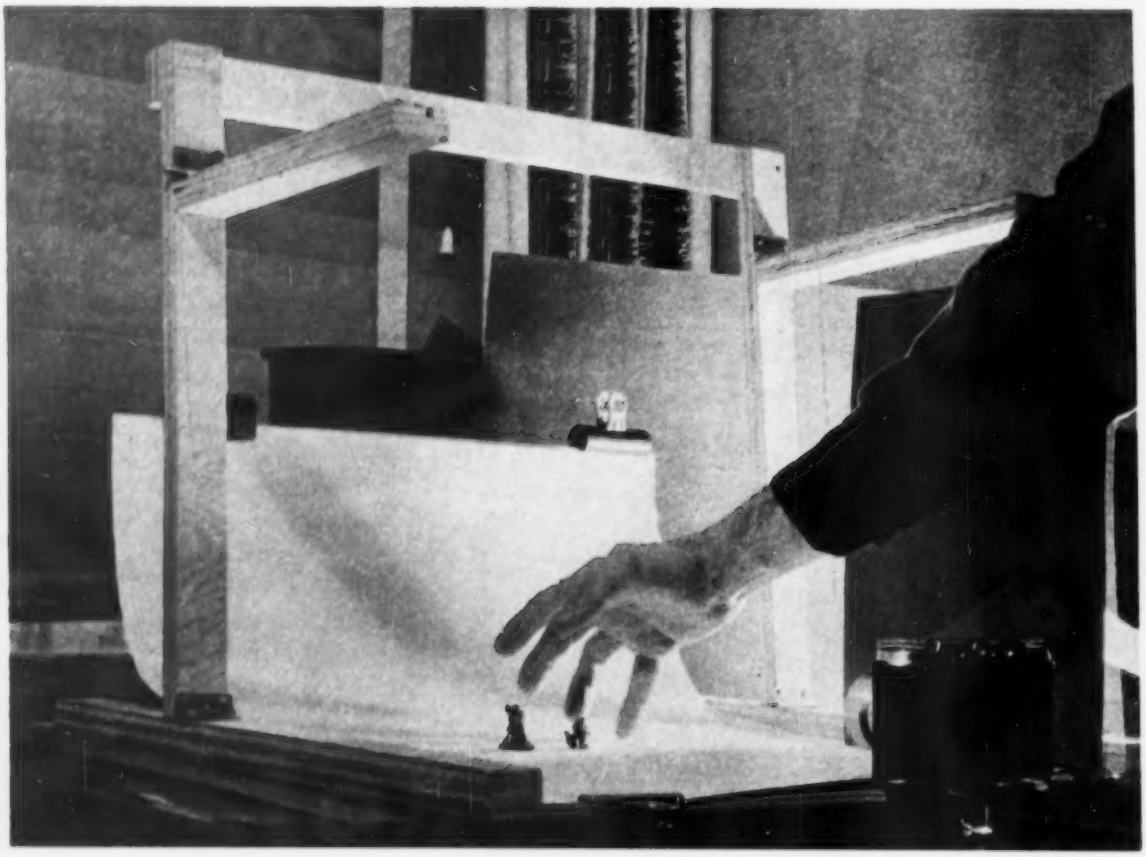
SUNSET: Flaming sky above Cannon Beach, Oregon, was recorded by Ray Atkeson with a 4x5 Speed Graphic and an *f*/4.7 Ektar lens.

To capture sunset colors he took meter reading of scene's brightest areas, then exposed Ektachrome for 1/5 sec. at f/11 with CC14 filter.



Stage a

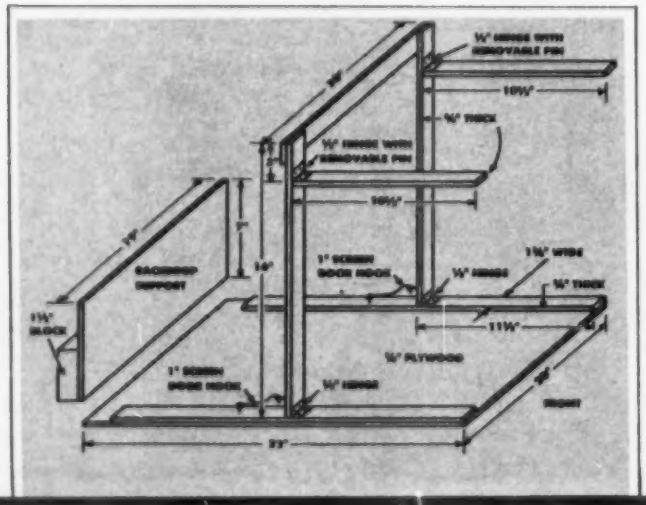
The settings are limited only by your imagination,



Setting, above, for final tabletop at far right, using simply constructed plywood stage, diagrammed below. Over-all dimensions of stage are 20 in. wide, 22 in. long, and 16 in. high, based on a depth of field from 7 to 13 in. with a lens aperture of f/16. Camera should be centered on a 10-in. line coming from stage front before diagramming lens range. Vito II was used.

HEY THERE, you with the camera! May we assume that you may not be using it just now for any one of several reasons: lack of new subject material, especially if you are a color enthusiast, lack of ideas, or just plain between-season lethargy? And may we offer a colorful, inspirational, year-round solution for your temporary inactivity? Try shooting tabletops on color film.

Any standard size (including 35-mm) camera with a fast lens and a bulb or time shutter setting can be used, along with a portrait attachment, necessary for getting in close to your subject. And (*Continued on page* 117)



tabletop

By JOHN DEVOL

props are everywhere, and you don't have to wait for the weather

China chipmunks recoil from gargantuan human hand in this simple tabletop fantasy. See over-all shot of setup on opposite page; yellow background paper is curved onto background support and secured with spring clamps. One floodlamp is at right.

Sunset scene was created with foreground cut from black paper supported by blocks, aluminum-foil water, an artificial miniature tree. Lighting, 1 spot; red and yellow mount; 1 second.

Creature from outer space is plastic dime-store toy; converging tubes are plastic straw. Mount in front of one spot was covered with half red, half blue cellophane. Exposure, 1 second

Snowscape is possible year round using salt, miniature trees sprayed with aerosol plastic, china deer. Exposure, 10 sec for star, ½ for foreground.

Four ways to shoot color

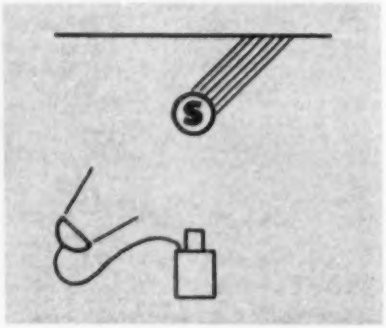
FLASH from a speedlight unit or blue-tinted flashbulb is a quick, cool,

THIS year, for the first time in the history of photography, color films can be used by amateurs with almost as much freedom and flexibility as black-and-white. Even at their rated speed of 32, the fast new Ansco and Eastman reversal materials are on a par with most of the popular black-and-white films of a few years ago, and with special processing they can yield good results at exposure indexes of 64 or even 128. (See *New, Faster Ektachrome*, POPULAR PHOTOGRAPHY, May, 1955, and *Anscochrome*, June, 1955.) For amateurs who want to shoot indoor pictures this is good news, indeed. On these and the following two pages are examples of four indoor lighting methods which can be used by almost anyone with a camera.

To begin with, let's take a look at that long-popular standby, flash. There are two easy, almost foolproof ways to shoot flash pictures in color. The first is to load your camera with any of the various *daylight* color emulsions and expose by the light of electronic flash or blue-tinted flashbulbs. In most cases the light from a blue flashbulb or a speedlight unit will approximate the quality of daylight closely enough so that you'll get good color rendition without a filter. (For details, see the chart in *Filters for Color*, POPULAR PHOTOGRAPHY, August, 1955.)

An alternative for color flash is to load your camera with the fast new Type F Ektachrome, which is balanced for *clear* flashbulbs and gives a relatively high guide number.

When taking color pictures either with flashbulbs or electronic flash use the guide number given by the manufacturer and compute exposure in the usual way. A warning about electronic flash synchronized with a focal-plane shutter: since these shutters usually synch only at rather slow shutter speeds, be sure the existing room light isn't too bright or you may get a



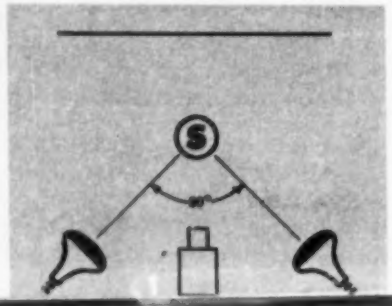
PHOTOFLOODS provide you with unlimited control over lighting, are

PHOTOFLOODS are the natural choice if you want to experiment with a variety of portrait-lighting setups. Multiple flash is complicated because of the need for ganging up the flash units on extension cords, but two, three, or even more photofloods are relatively simple to work with if you have clamp-on holders and light stands. Also, floods show you exactly what lighting effect you're going to get before you trip the shutter.

Use either conventional bulb-shaped photofloods in metal reflectors or mushroom-shaped reflectorless RFL2 photofloods. Both types emit 3400 K light and can be used in combination with any Type A color film without a filter. (Kodachrome, Kodacolor, and roll-film Ektacolor are currently available in Type A emulsions.) Type B emulsion, available in roll-film Ektachrome and sheet-film Ektacolor, is balanced for use with 3200 K professional studio lamps but can be used with photofloods if an 81A filter is employed. By far the most convenient and accurate method for determining exposure is to use an exposure meter, of course. However, you can achieve good results without one by measuring the lamp-to-subject distance carefully and dividing this number (in feet) into the guide number provided by the manufacturer of the photoflood.

Except for special effects, avoid excessive lighting contrast when working with color, because color emulsion has less exposure latitude than does black-and-white. Shadows tend to go darker than they look to the eye. The best way to achieve the proper balance between highlights and shadows is first to set up your mainlight and establish the basic illumination, then adjust your fill-in light (placed as close as possible to the camera so that it doesn't throw shadows of its own) until the shadows are barely visible. If you have an incident-light meter, take comparative readings and adjust the fill-in light, until the ratio is about 3-to-1; that is, the light falling on the highlights is three times brighter than light falling on the shadow areas.

Two floods can be used to create "flat" shadowless lighting, demonstrated in the portrait at right. Place one photoflood at 45 degrees to the right of the camera-subject axis, the other 45 degrees to the left, and adjust until both are at the same distance from the subject. (See diagram.) Floods now cancel out each other's shadow.



COLOR INDOORS continued

indoors

Text and photographs by ARTHUR GOLDSMITH

convenient light source

double image—one from the flash and one from the available light.

The simplest way to make flash portraits is to shoot with the flashgun attached to the camera, but usually a better picture can be made if you hold the flash unit at arm's length (with the aid of an extension cord) fairly high and to one side, with your subject facing the light. This was the method used to make the portrait reproduced at right; position of subject, camera, and flashgun is shown in the diagram at left. Moving the flash off the camera throws the inevitable, ugly black background shadow off to one side where it can be partially cropped out of the picture or eliminated altogether. (If you're not thoroughly familiar with lighting effects you may find it helpful to experiment first with a "pilot" flood.)

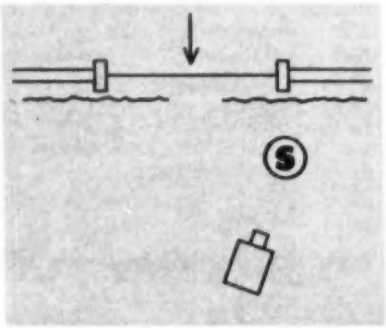
best for multiple-lamp effects

continued

WINDOW LIGHT is beautiful, natural, and simple to use with almost any color

THE use of window light in portraiture is far from new: Vermeer and other Dutch painters were exploiting its clear, soft beauty 300 years ago, and photographers have used it almost since the day photography was invented. It's still a good technique today for indoor portraits in color as well as black-and-white because the natural illumination from a window has a pleasing, subtle quality no photoflood or flashbulb can duplicate.

Pose your subject close to a window facing the light and maneuver your camera until you find a good angle, as shown in the diagram and illustration at right. The intensity of the illumination can vary greatly, of course, depending on weather conditions. Your subject may be standing in bright, direct sunlight or the light may be soft and diffuse if the sky is overcast. Direct sun gives the brightest colors and permits you to make well-exposed pictures even with a fixed-exposure camera loaded with fast color-negative film like Kodacolor, Ektacolor, or a fast reversal film like Anscochrome or E2 Ektachrome. However, bright sunlight causes strong, dark shadows and creates the very type of lighting contrast color photographers usually try to avoid. As long as no important facial details are obscured in these heavy shadows the effect need not be unpleasant. But if you want to brighten up the shadows place a sheet of white cardboard just out of the picture area and reflect some light back into the shadow areas. Either prop the reflector in position or enlist the aid of an assistant. On hazy or overcast days the window light will be softer and the resulting shadows much less distinct. However, daylight falling from an overcast sky contains an excess of blue, and this should be reduced by placing a Skylight filter or its equivalent in front of your lens. Base your exposure on a careful meter reading and remember that the intensity of light falls off with the *square* of the distance. Therefore, to make maximum use of the window light and reduce the amount of exposure needed, pose your subject as close to the window as possible.



AVAILABLE LIGHT allows utmost freedom of movement but requires a

AVAILABLE-LIGHT color photography is still something of a wild frontier where every photographer is on his own and every formula contains a sizable X-factor. Exactly how the new Ektachrome and Anscochrome films will perform under these conditions is still a question for time and experience to tell. In the meantime, it's encouraging to remember that many amateurs and professional photojournalists have been making fine available-light pictures for years with the old color films. (See *This Color Camera Went to Market*, PHOTOGRAPHY, September, 1952.)

Despite its exposure index of 16, Type A Kodachrome is still about the best bet for most available-light photography because its color balance is closer to the illumination you're likely to encounter in available-light work than is the faster Type F Ektachrome emulsion. (At this writing, Anscochrome is not yet available in an "indoor" type.) However, Daylight Ektachrome, Anscochrome, and Kodachrome can be used successfully when the available light comes from blue-white, daylight-type fluorescent lamps. The picture of a little boy, reproduced at right, was made on 35-mm Anscochrome with the main illumination falling from overhead fluorescent lamps and additional daylight entering through large win-

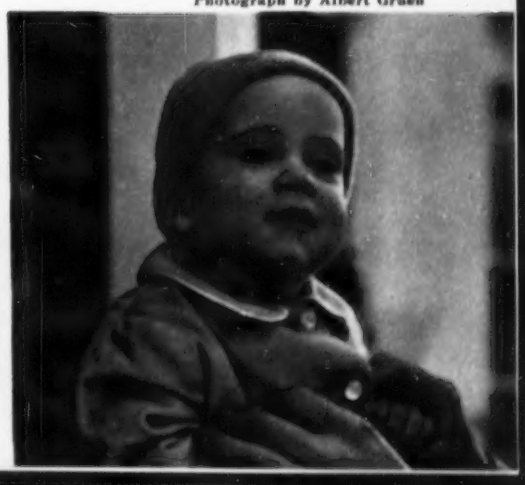
film and camera

high-speed lens and slow shutter speeds

dows. Exposure was 1/50 second at f/3.5.

A good exposure meter and a camera with a fast (at least f/2) lens are recommended if you want to explore available-light color photography. Practice holding your camera steady at slow shutter speeds—if the light is poor you may need to use 1/10 or even 1/5 second. (For helpful suggestions on this subject, see *Steady!* in the July, 1955, issue of POPULAR PHOTOGRAPHY.)

Photograph by Albert Gruen



Slide showmanship

By ROBERT L. McINTYRE

WHAT MAKES a good color-slide show? First you need some pictures, but that's not enough. They ought to tell a story. The loudest applause awaits the photographer who can take a pile of slides, arrange them in an order that makes sense, blend in his own commentary and perhaps some background music, and create an hour's entertainment for his audience. The pictures are just the starting place. It's what you do with them that counts.

Vacation travelogs are the most popular type of slide shows, and small wonder! We all like travel, to see new sights and different people. And next to seeing them ourselves we enjoy telling our friends about them. The modern color camera is an ideal tool to help us. It brings back images of things that words alone couldn't begin to describe.

No matter what type of show you want to put together, it must start somewhere and stop somewhere with an orderly sequence that tells the story in between. Try to picture how you would describe the content of your show in words, and follow the same pattern. In travel shows the route that was followed often makes a good outline. Each stop along the way represents a sequence of pictures on one particular subject. It is one segment of the show, to be developed into a well-rounded little unit and then carefully linked together with the scenes that come before and after it.

How long should each sequence be? That depends on the story it has to tell. Each slide should remain on the screen long enough for your audience to grasp

There's applause awaiting if you follow these tips on presenting your pictures

what is in it. A view that is rich in detail, interesting to explore, like the window of a curio shop, might be shown for 20 or 30 seconds if it is particularly fascinating. A simple shot that makes its point quickly may require only a few seconds. The sequence length can be obtained by adding the projection times of all the scenes within it, unless your commentary introduces another problem.

Sometimes there is a very interesting story behind a picture, a story you want to tell even though it takes longer than the normal screening time of the slide should be. This is where the moviemaker's technique of making long shots, medium shots, and close-ups comes in handy. If you shoot the subject from several different angles, you will have enough slides so you can change the picture on the screen while telling your story. The use of pictures that have minor flaws may be justified in a case of this sort. If you find yourself leaving slides on the screen too long, chances are that you are trying to tell too much or haven't taken enough pictures.

A big advantage of slide shows, like movies, lies in the fact that you don't have to show every picture in the order in which it was taken. You can eliminate shots you don't need and slides that don't measure up to your usual standards. You can shift pictures around to place them in best possible order to tell their story in each sequence, and then arrange the sequences to make the show.

Time and space are missing dimensions in trav- (*Continued on page* 116)

Soft quality of the light in the shade of a garden wall brought out beautiful skin tones and the delicate colors of the fruit. Exposure was 1/5 sec at f/4 on Ektachrome.

Bright umbrella is welcome spot of color as hazy, over-all blue catches feeling of rainy day in the woods. Ektachrome, 1 sec at f/5.6.

Fred Smith:

→

Canopy of pink cloth hung from trees made an ideal "studio," warming and diffusing the light on model. Ektachrome, 1/25 sec at f/4.

Textures at work: Note how rocks, stole contrast subtly with model, shadows shape her back. Plus-X, 1/50 sec, f/4.

the nude outdoors

With the wide world for a studio, this photographer uses natural textures in his figure studies

FRED SMITH'S approach to photography of the nude female figure is one that could be used advantageously by other photographers struggling for worthwhile pictures of nudes. Long accustomed to working with experienced models in his profession as a magazine artist, Smith felt that in this particular field he would come up with better results if he took the model out of the hackneyed, formal atmosphere of the studio and put her into a situation to which she would react spontaneously as a person.

The woods around his own country home provided an ideal location. There he could work without space limitations, his "props" were ready-made for him, and his model was relaxed and moved about easily, unselfconsciously. The forms and textures in nature supplied an endless variety of contrasts to work with.

Smith's working technique involves the sole use of the Rolleiflex, whose groundglass viewing he feels is perfect for this type of controlled shooting, and a tripod, which he uses to assure sharp results. For a man who backed into the field by way of magazine illustration, Smith shows a fine understanding of photography as a distinct medium. If you read our May, 1955 issue, you may remember our article on his use of photographs as a kind of preliminary sketch for the stories and ads he illustrates. In time he became fascinated by pictures on their own merits; he has an artist's eye for color and form, yet his camera work shows a true photographic viewpoint.

For people not lucky enough to live on their own plot of private land, Smith suggests trying secluded beaches early in the morning, or the less-frequented forest reserves still within reach of most cities by car—anywhere you can find a hidden, isolated spot. Then just let your model react to the materials around her. One example of the success of this attitude is the middle picture at left. Said Smith, "She loved to be in the rain, in the nude—and what better chance to get good pictures, than when a woman is happy?"—*Michael Aleshire*

light on model. Ektachrome, 1/25 sec at f/4.

for this type of controlled shooting, and happy? —*Michael Aleshire*

Pictures from our readers

THE FIRST PURPOSE of every issue of POPULAR PHOTOGRAPHY is to help and inspire its readers. And the first test of its success is the quality of the photographs it helps them to make. The information and guidance about color that we bring to our readers continue to bear fine fruit in the form of superb color transparencies. On these pages we bring you an expanded Pictures from Our Readers section, reflecting both the excellence and the variety of the color work that is being done today by the nation's amateur and semi-professional photographers. There are six pictures, each of an entirely different kind: a street scene, an action shot, a child study, a strong design, a portrait, and an animal picture. Each is of completely professional caliber, an outstanding photograph of its kind by any standards. We congratulate these six photographers, and in a broader sense we congratulate each of the thousands whose work we have had the pleasure of seeing. So much of it is so good that we wish we had even more space to publish it. We are proud of the part we have had in improving your color camera work, in guiding you to new adventures in color, in acquainting you with the newest and best in equipment and materials for color. And our service to you will continue to be as complete and inspiring as we can make it.—

1 *Egon Eduard Weck, Berlin, Germany*

Mr. Weck, an officer of the U. S. Information Service stationed in Berlin, made this typical small-town German street scene in the state of Württemburg, during a holiday trip. As he was preparing to shoot, and looking for a center of interest, a boy walked out in the street and the picture was complete. Weck used an Exakta Varex with 58-mm Biotar *f*/2 lens, and shot at 1/25 second, *f*/8, on Kodachrome Daylight Type film. The subdued monochromatic earth-colors of the masonry in the old houses lend a quiet distinction and realism to the picture. This is an example of the type of color picture that succeeds with subtlety, rather than gaudy color contrast.

2 *Irwin Lubroth, Brooklyn, N. Y.*

3 *Anne Brennan, New York City*

Pictures from our readers continued

2 In a Brooklyn schoolyard, Irwin Lubroth noticed this wall as a natural spot for pictures. He has made many of what he calls "after-school compositions," relating the color, texture, and design of the wall to the children who play in front of it. In this case they were two sisters, Frances and Angelina Leonardi, who remained completely unconscious of the camera while they played. Lubroth used a IIIf Leica with a long-focus 90-mm f/4 Elitar lens, and Kodachrome Daylight Type film. His exposure was 1/200 second at f/4. The shutter speed was fast enough to stop the action at this graceful instant, but there is still slight blur in the girls' dresses, which heightens the impression of motion. Note color harmony between bright clothes and pink wall.

3 In a small town in Lancaster County, Pa., Anne Brennan of New York City found this small girl pulling a bright-red wagon. She says, "Her delicacy, childlike simplicity, quaintness of dress, and bare feet were indeed impressionistic. I felt that the combination of the red of the wagon and the blue of the child's dress, plus her own personal charm, was good picture material, and I tried to capture it on film." Anne used a 35-mm Voigtlander Vito II with a 50-mm Skopar f/3.5 lens, and Kodachrome Daylight Type film. She shot at 1/50 second, f/6.3. This picture, like the one above it, shows the photographer's skill in setting simple areas of primary color against solid backgrounds of neutral tone. Here, an elevated viewpoint helped avoid distracting elements.

4 Design is a strong element in Alan H. Rosenberg's shot of a man on a bench beside a swimming pool. Rosenberg points out, too, that it was something of an achievement as an "exact instant" picture. The subject, his father-in-law, is ordinarily quite camera-conscious. Here, he noticed the camera just a split second before the shutter was tripped. Alan says, "His resulting expression, a half smile, is to me a biting satire on my original purpose. He seems almost to be laughing at the strict, precisely geometric composition in which he plays so important a part." Rosenberg's camera was a Leica IIIf with long-focus 90-mm Elmar f/4 lens, and his film Kodachrome Daylight Type. Exposure was 1/50 second at f/8 through a Skylight filter, to correct blueness.

5 Jack McKeown of Los Angeles describes himself as "just an amateur with a great burning desire to be able to say someday I earn my living as a photographer." He made this strong outdoor portrait of architect Ken Sullivan in open shade, using an Exakta V with 240-mm long-focus Xenar f/5.5 lens and Kodachrome Daylight Type film. McKeown says, "This is one of a series of shots made as experiments in getting the background out of focus while the model, in open shade in the foreground, remained sharp." Here the background does not detract; it actually contributes an element of design, which is in keeping with the subject's vocation. Exposure was based on the shaded face, purposely overexposing the background. Exposure: 1/5 second, f/6.3.

6 The startling cat picture is of the type that is sometimes dismissed as "just a lucky shot." But, as usual, a great deal more than luck was involved in getting it. Jon Deemer of Los Angeles had studied "Beastie" daily as she lay soaking up the sun in his back yard. Late one afternoon, he saw the sun glinting in the cat's eyes, and knew it was the shot he had been waiting for. He used a Contax IIIa with 50-mm Sonnar f/2 lens, and Kodachrome Daylight Type film. To concentrate attention on those flashing eyes, and throw the background a bit out of focus, Deemer used the wide aperture of f/2.8, and a shutter speed of 1/10 second. This is a perfect example of a color photograph in which a tiny splash of brightness puts life in an otherwise lifeless picture.

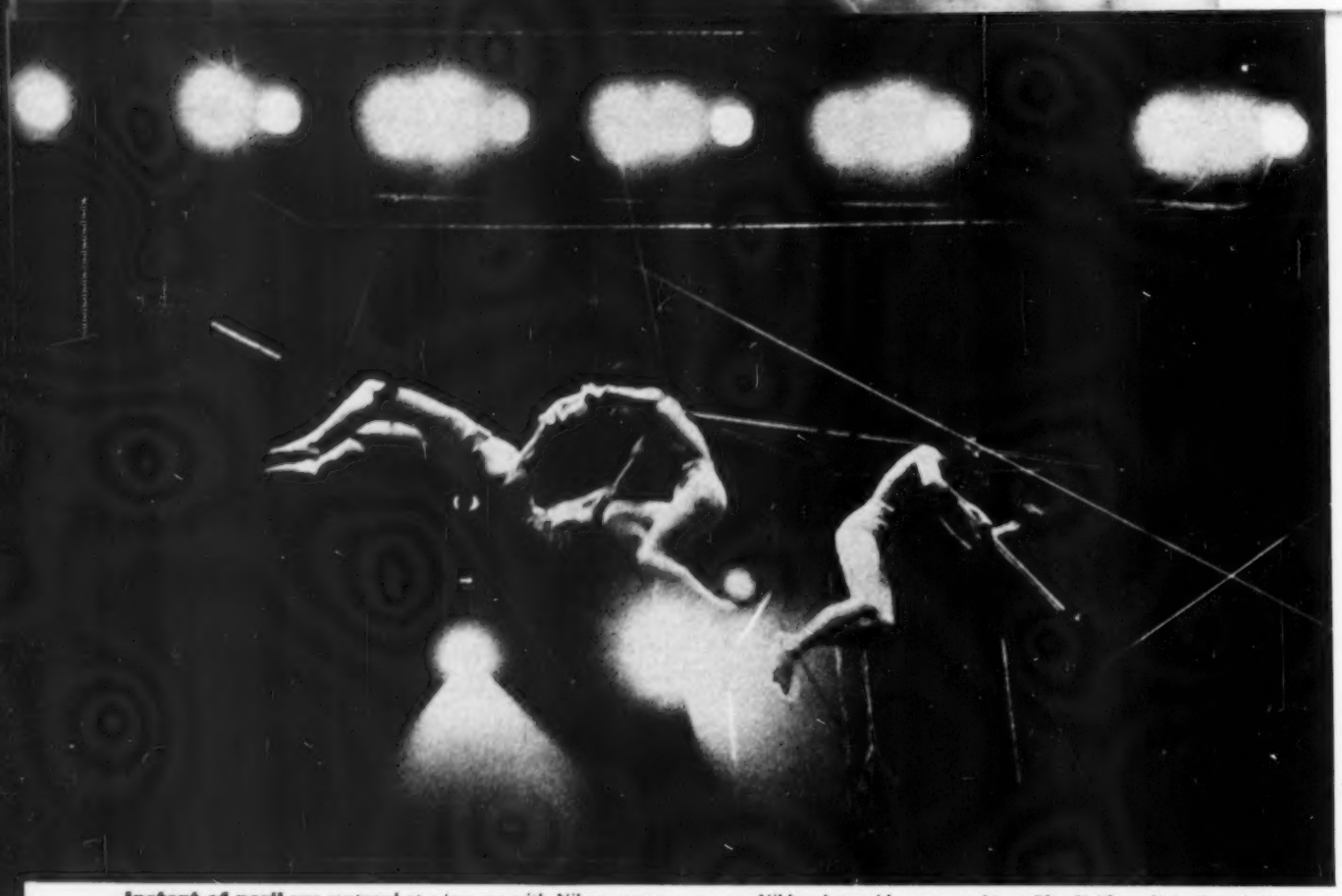
4 *Alan H. Rosenberg, New York City*

Pictures from our readers continued

6 *Jon Deemer, Los Angeles*

5 *Jack McKeown, Los Angeles*

graph in which a tiny splash of magenta puts life in an otherwise lifeless picture.



Instant of peril was captured at 1/100 sec with Nikon camera, 135-mm Nikkor lens wide open at f/3.5—Plus-X "forced" in Promicrol.

COLOR

Action

Stopping the moment of suspense

Photographs by Marvin E. Newman

THE GLIBLY STATED TRUTH that peak action can be stopped at slow shutter speeds is graphically confirmed in the Kodachrome spectacular on the facing page—planned and executed by a young New York professional, Marvin E. Newman.

Shooting from the floor of Madison Square Garden on the opening night of the 1955 Ringling Brothers, Barnum & Bailey Circus, the photographer isolated his subject (headline trapeze artist, Mara) in the finder of his M-3 Leica to which an 85-mm Nikkor f/1.5 lens had been specially fitted. The performer's graceful swing was stopped by a shutter-speed setting of only 1/50 second on Type A Kodachrome, with the lens stopped down to f/2. Firing a filtered SR II (Strobo Research) electronic flash lamp as a fill-in source from the camera posi- (*Continued on page* 132)

Action, right, stopped on slow 35-mm Kodachrome at 1/50 sec, f/2—existing light supplemented by filtered electronic-flash fill-in source from 40 feet away.

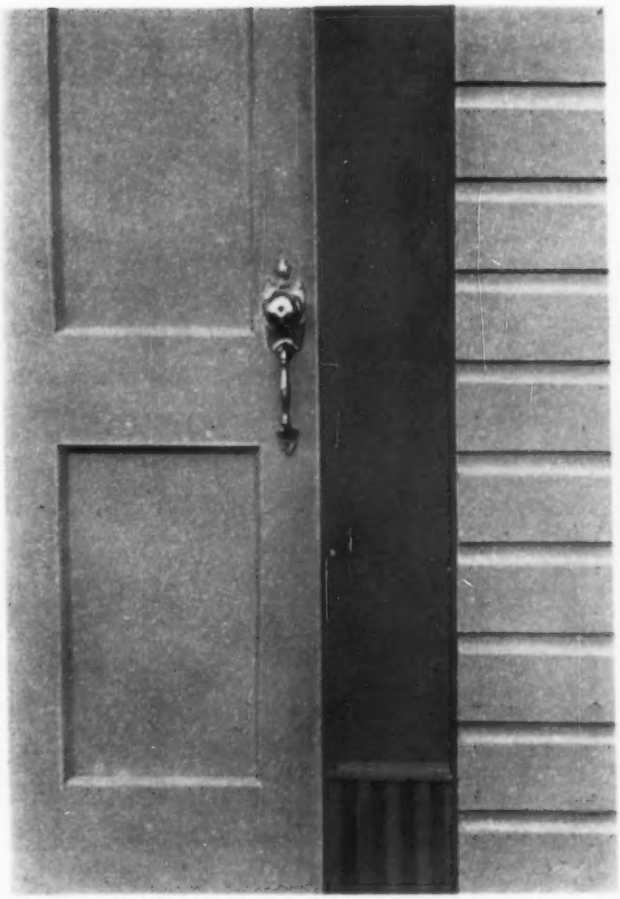
Berko's

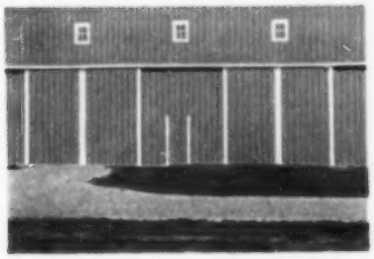
This imaginative 35-mm photographer discovers a new

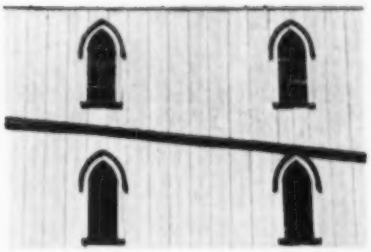
EVEN THE common barn can provide some wonderful possibilities for compositions in color, line, and form if a photographer will keep his eyes open. Ferenc Berko, an exponent of photography as an artistic medium, truly used his camera as an extension of his eye in making this series of imaginative, colorful studies. As a sort of photographer at large, Berko car-travels the country on assignment, but takes pictures like these purely for his own pleasure. He keeps an eye out for a subject that best lends itself to a series of beautiful designs, particularly in color, then begins collecting examples, sometimes taking as long as a year before he feels that all its idea possibilities have been thoroughly worked out. He frequently has several ideas going simultaneously and stops along the road to take a picture here or there, for one series or another, as he sees them. He edits the final batch down to 10 or 15 of the best and they are ready for the ultimate use he had planned: slide projection.—*Carol Smith*

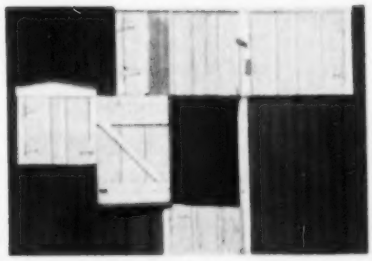
Barns

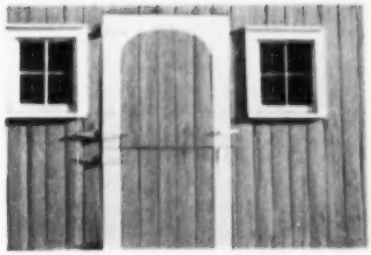
wealth of color and design in a country setting

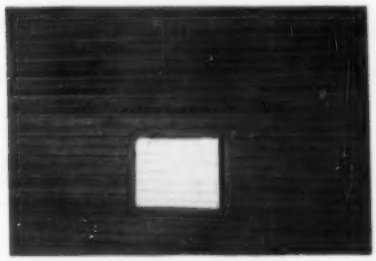












Good design is everywhere, even in such an unexpected place as a farm. It is only for a discerning eye such as Ferenc Berko's to seek it out. The locales of his bucolic color compositions are Iowa (opposite page), Colorado (above), and Iowa, Pennsylvania, Iowa, Oregon, Nebraska, and Kansas (top to bottom, right). He photographs with an Exakta V because he likes to use its groundglass viewfinder for composition. He uses both a 50-mm and 90-mm long-focus lens to crop pictures in the camera and to isolate details. Exposure: 1/50 sec at f/5.6 to f/8; Kodachrome.

New ways with

Photograms

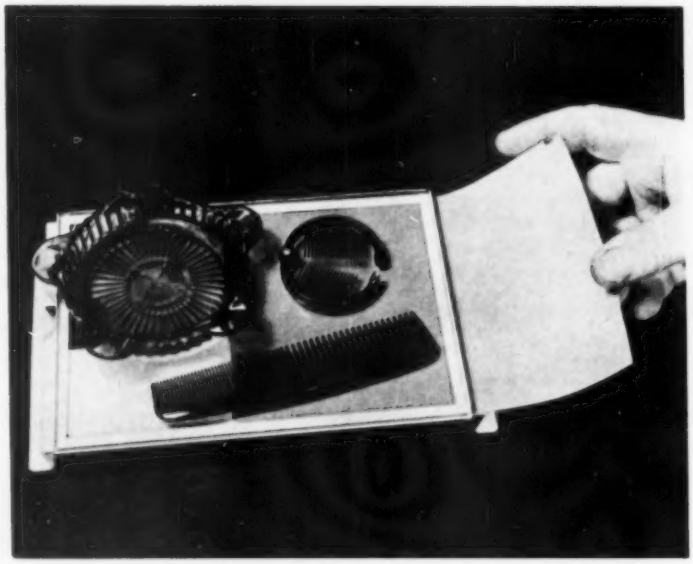
Try two special color films to get spectacular results with a minimum of fuss and muss, or use black-and-white printing-out paper—no darkroom needed

By OTTO BAYER

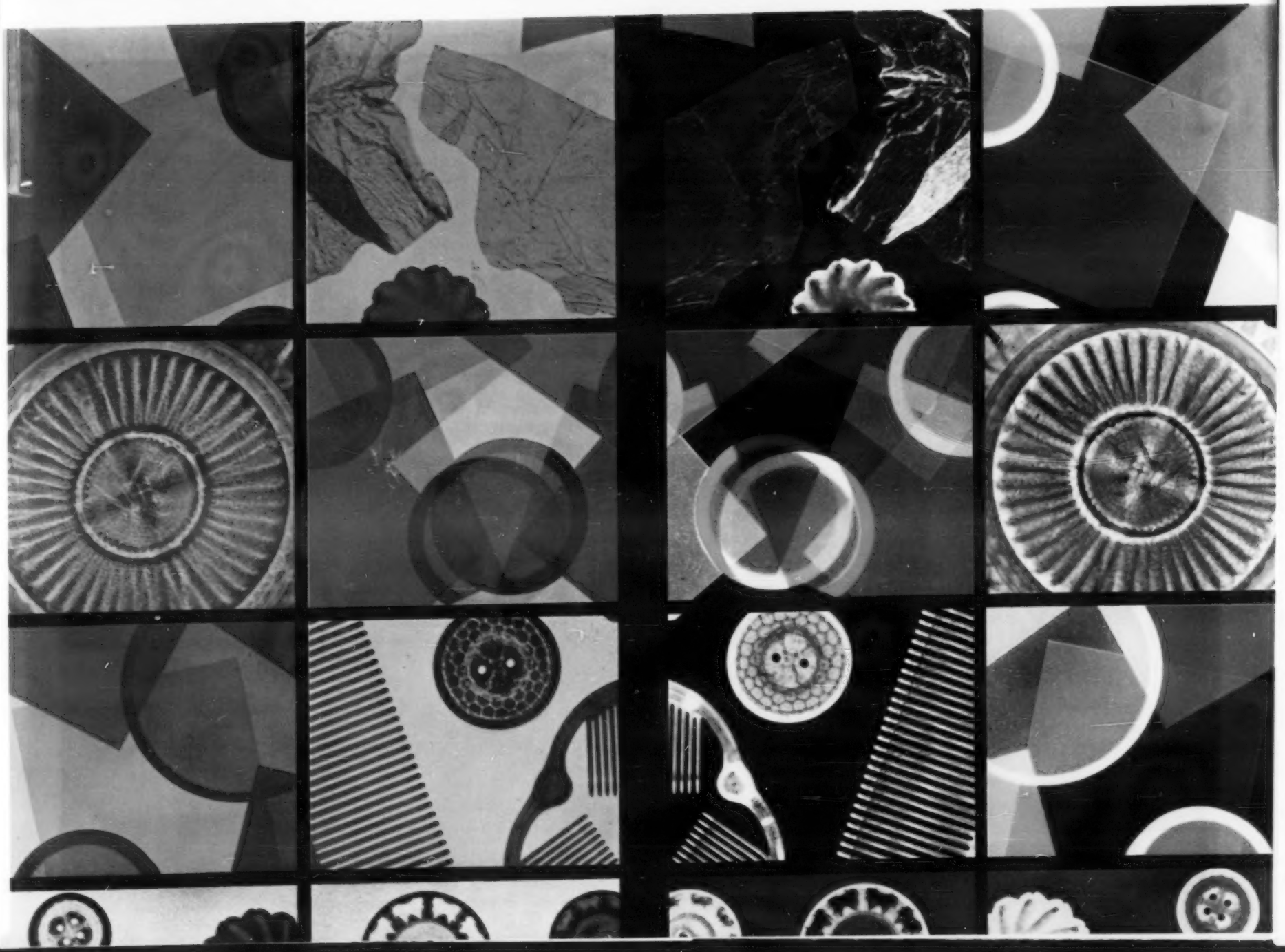
AS AN OLD established darkroom practice, the photogram—a "light drawing," according to Webster—has always been a source of fun for rainy days, and an exercise in design which offers visual effects available in no other medium. But two new approaches to photogram-making open new vistas for everyone. One is the use of color film instead of black-and-white enlarging or contact paper. The two home-processed color films illustrated on the opposite page—Kodak Ektacolor Print Film and Ansco Duplicating Film 638—cost about half as much as picture-taking color materials, and are almost limitless as far as experimenting goes. They also provide a painless introduction into the special aspects of color processing because a high degree of accuracy isn't necessary to get pleasing color effects.

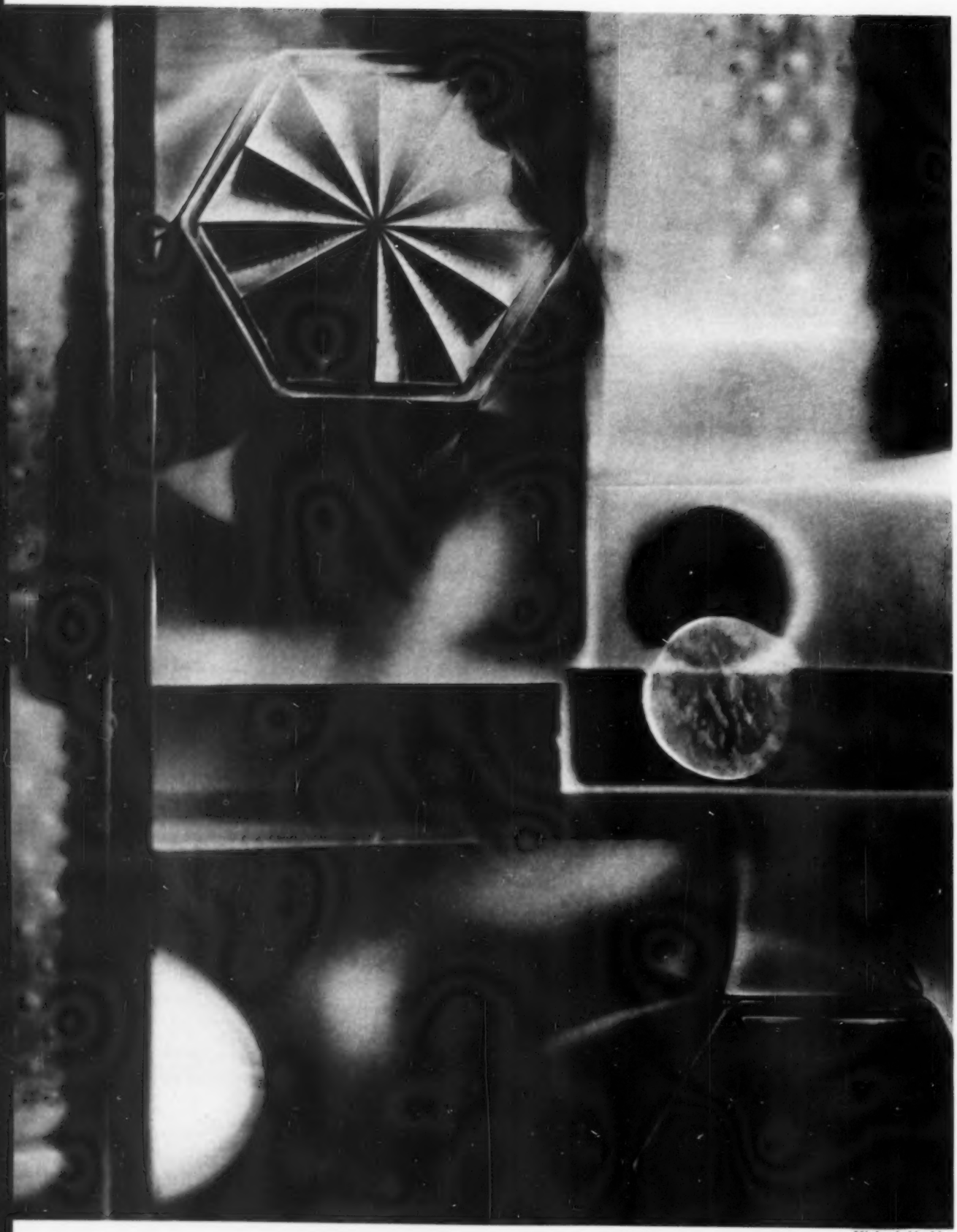
The other new idea takes an old product that has been on the market for years called Printing-Out Paper. Originally used by photographers to make contact prints by sunlight, this paper needs no special darkroom handling, no developer—it darkens visibly when exposed to strong light, and doesn't need chemical action to bring out the image. The only solution required is a fixing bath to make the image permanent—and even this step can be carried out under normal room lighting. On the following page you'll find a photogram made by this method.

Some real surprises are in store for you when you first try your hand at "colorgrams." In the first place, the spectral color distribution of many materials differs greatly from the way their colors ap-



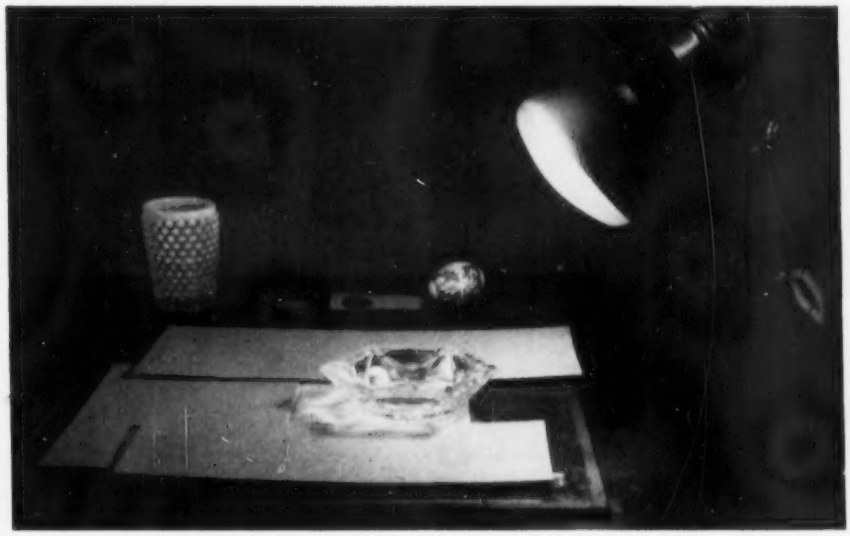
You can expect results like those at right from two color films suitable for making photograms. Upper half of page was made with Ektacolor Print Film, normally used to print color negatives. Colors of original objects are reversed, end up as complementary hues on the film. Note filtering effect of superimposed transparent colored gelatin squares. Dark-brown backgrounds result from using unbalanced enlarger light for exposure, blue backgrounds from partially balanced light (see text), magenta background at far right from processing in cold solutions. On lower half of page we have reversed the photograms to show approximate results using same objects with Ansco Duplicating Film 638, reversal film yielding a positive transparency. Colors are about the same as those of the original objects. Processing conditions for both films may be varied from the norm for different color effects. Films come in all sheet-film sizes. Photo above shows objects arranged in light on glass pane placed over easel; film is then slipped into place underneath glass, in total darkness.





Michael Aleshire

Here's how to make printing-out-paper photograms: with sunlight or photoflood lamps



1

2

3

Printing-out-paper photogram on opposite page was made by technique shown above. Light source was 115-w RSP2 lamp clamped to chair back. Cardboard was placed over paper, leaving small area uncovered; one of the objects (glass, ashtray, egg, paper cutout) was then placed on this open area and exposed. This area was then covered, object moved to different position for exposure. Crayon guide lines on glass printing frame indicated previously exposed areas. Desired tone was reached in 2 minutes, exposure extended to 6 minutes to account for bleaching effect of the fixing bath.

1 Printing frame is placed in open window for even illumination. **2** In strong light P.O.P. soon darkens; exposure must be 2-3 times longer than needed to reach good tone. **3** Hinged back allows inspection during exposure without displacing the objects.

pear to our eyes. What appears to be a clear glass ashtray may turn out on the color film as a luminous green or red, depending on which film you use. For this reason, you'll have more fun if you make use of a large percentage of transparent or translucent, rather than solid, objects. An opaque item will turn out as a dark, almost colorless area on Ansco Type 638 Film, and as a white area on Ektacolor Print Film.

Because of the forementioned optical phenomenon, it is difficult to tell just what color an object will turn up as on the film—thus adding to the fun—but in general, Ektacolor Print Film reverses color values, and renders green objects as red, blue as yellow, etc. Ansco 638, on the other hand, produces a positive transparency via the reversal processing method, and colors are in their original hues.

Exposure for both these films is not so critical as when they are used for their normal purposes, but nevertheless you should establish definite exposure values for your own equipment. As a starting point, the color illustrations for this article were made with an Omega B-6 enlarger equipped with a 75-w No. 111a enlarger lamp; the enlarger was raised to the top of the post (representing the postion for a 6½ diameter enlargement) and the 3½-in. lens set at *f*/8. The exposure was about 45 seconds for Ektacolor and 30 seconds for Ansco 638.

Any incandescent enlarging lamp can be used for the exposure, but for more perfect color rendition, the lamp should be balanced to the film by placing the appropriate filter in front of the lens. For Ektacolor, this is the Wratten 21, available in gelatin sheets at low cost. You can also make your own filter to approximate the correction of the Wratten 21 by using a completely processed but unexposed sheet of Ektacolor. Ansco also recommends a correction filter (the UV-16P) for standard use with their film. But whether you use these correcting materials for each film or not depends entirely on your tastes, since color photograms depend on pleasing—not necessarily accurate—colors.

Processing is a similarly liberal matter when it comes to accuracy—although for consistent results your methods must be consistent (whether "correct" or not). A special processing kit is available for Ektacolor, in 1- and 5-gal. sizes. Ansco 638 is processed in Ansco Printon developing kits, in sizes of 1 qt and larger. Complete instructions are supplied with both kits.

Both films are best handled in total darkness, which means you may want to resort to the technique shown on the previous page for arranging objects over the film area under normal lighting, then turning off the lights and slipping the film into place for the exposure. If you're careful not to let light strike the film directly, you can use a Wratten 7 safelight for (*Continued on page* 118)

Leonard McCombe was named Magazine Photographer of the Year for a portfolio on Rio de Janeiro which included this street scene. McCombe shot it with a Contax and 35mm Biogon *f*/2.8 lens; 1/250, *f*/5.6.

A round-up of recent PRIZE

"Korean Educators" from the portfolio that won Earl Seubert the title "Newspaper Photographer of the Year." Seubert used a Speed Graphic, shooting at 1/200, *f*/32.

"Trees in Fog" by Jack Kilpatrick earned first prize in the Graflex Photo Contest, Non-Professional Class. Made with 4 x 5 Crown Graphic at 1/100 sec., *f*/11.

"Cormorant" by Robert Ludlum, California high-school student, won $300 Grand Prize in Eastman Kodak-NHS Photographic Awards, Animal Group.

EACH year there is an increasingly wide range of photographic contests which offer both professionals and amateurs a chance to win prestige and prize money. To keep our readers informed about what kind of pictures are taking prizes these days, from time to time we will publish a round-up of top winners.

Prominent among recent competitions was the National Press Photographers Annual Photo Contest, sponsored jointly by the NPPA and the Encyclopedia Britannica. Two pictures on the opposite page represent two top winners.

Leonard McCombe of *Life Magazine*, named Magazine Photographer of the Year, becomes the first man to hold that title twice. *Minneapolis Star and Tribune's* Earl Seubert won as Newspaper Photographer of the Year. His "Korean Educators" also took first place in the contest's Personalities Category.

Two recent competitions with a variety of categories open to both amateurs and professionals were the Graflex Photo Contest and the General Electric Lamp Division photoflash contest. G-E offered a $1000 grand prize and Graflex's seven top awards were from $300 to $500 each.

Young photographers from all over the nation competed in the Scholastic-Ansco Photography Awards, which judged 31,000 entries, and the National High School Photographic Awards, sponsored by Eastman Kodak Company.

WINNERS

It's the season for photographic awards. Here are six of them

Sarah Martin of Rockwood, Mich., won the G-E Contest with "Sweet Summer Breeze." She used a Rolleiflex, Super-XX, and exposed for 1/100, f/22.

First-prize picture in Scholastic Ansco Sports Classification. Paul Richards, of Los Angeles High School, captured diagonal pull and minute muscular detail of racer's body with a Speed Graphic.

The Kodak BULLETIN

Coldest Film &

—or, why color test strips dwell happily in a deep freezer . . . the leisurely emulsion that slices millimeters into milli-millimeters . . . the philosophy of good filters (and why their owners stay young) . . . transparencies for the tax assessor . . . how to pack a photo lab into a shoe box . . . and a lady who loves her Kodak Chevron Camera

Deep-freeze color

In the color processing laboratory where you have your Kodak Ektachrome Film developed, this may well have happened today:

> A man took a small package from a deep freezer and carefully opened it. After checking a piece of cardboard for signs of a red dot, he removed a packet from the box and also a short strip of developed color film. The box went back in the freezer. The man then took the packet to the darkroom where the day's run of Ektachrome was being processed, opened it, and took out a short strip of undeveloped film which he attached to the film rack. A couple of hours later, the man had two developed strips of Ektachrome, the one that was just run and the one that came already processed. He put them in a densitometer and plotted points on graph paper. Then he returned to the processing room and discussed something technical with the man in charge.

What's this all about? It's just a color laboratory using our Kodak Ektachrome Processing Control Strips to make sure the processing operation is right on the button. We make these control strips by accurately exposing Ektachrome Film on sensitometers. Each strip has a series of

color patches, a gray scale, and a portrait, and they're shipped out undeveloped, 20 to a box. We also send along a precisely developed strip to use as a standard of comparison.

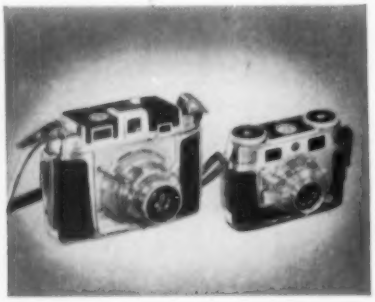
Why the deep freezer? As you know, the latent image on exposed film changes slightly over a period of time. Low temperature holds this change to a minimum. So, we package these precision strips in dry ice and store them in a freezer. We even put a little indicator in the shipping package—it shows red if the temperature has gone above freezing on the way to your Ektachrome photofinisher.

All this is a lot of trouble we don't *have* to go to. It's expensive, for the packaging and handling alone cost almost as much as we charge for a box of 20. But we make Kodak Ektachrome Film to the highest possible standards of quality and uniformity, and we want to do everything we can to help the color lab give you the finest possible processing job.

Complaint department

We often speak of the Kodak Chevron Camera as "a man's camera—for man-size tasks." Now comes a complaint from a feminine Chevron enthusiast in Greenwood, Miss. She has a Chevron and thinks it's wonderful. We agree, and have assured her of our devotion to the fairer sex.

The "man's camera" idea originated because the *Chevron* is a big, husky 2¼



x 2¼ camera, while most women prefer trim, compact models such as our 35mm Kodak Signet 35 Camera. Both have Kodak Ektar *f*/3.5 Lenses, so each stands at the top of its class. The pictures you make with them will rate "A's," too. See your Kodak dealer.

▶ Summertime is fill-in flash time. You'll find detailed information on the subject in the Kodak Data Book "Flash Technique." 50¢ at your Kodak dealer's.

The pleasure of filters

Kodak Wratten Filters are scientific instruments. They are also useful photographic tools. And they are devices that give a lift to the spirit.

Sure, you can take good pictures without filters. But the man who scorns filters tends to become a crabbed and narrow soul, addicted to conventional themes and routine subjects. The true filter en-

thusiast is an adventurer, an explorer who daily renews his youth.

The filter connoisseur is a man who wants to *know*. (He'll take a color shot with the right filter, for the record; then some with the wrong filters just to see what happens. Often what happens is more interesting pictorially, and he has new effects to brag about. This is one of the things that make photography exciting.)

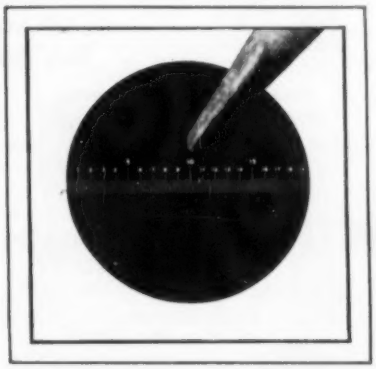
What are the right filters? For black-and-white shots, start with the Kodak Wratten K2, A, and X1, and go on from there. For color, the Kodak Skylight Filter (for open-shade shots and less "blue haze" in long-range scenics), and a variety of precise filters for Type A (photoflood-balanced) and Type F (photoflash-balanced) color films. Prices, $1.75 up in standard series sizes. There s also an inexpensive group of solid-glass Kodak Pictorial Filters, for general black-and-white picture taking. See your Kodak dealer, build up your filter collection, and maintain your photographic youthfulness.

▶ Next time someone asks you how to

Sharpest Plates

synchronize an old beat-up camera for flash, do him a good turn. Just point out that for about the price of a good synchronizer, he can have a brand-new Kodak Duaflex Camera with a good color-corrected *f*/8 lens *and* flash unit. Then he'll have *two* outfits . . . and better synch, too, if his old camera is an average antique. Most flash shots are taken in the *f*/16-*f*/8 Duaflex range.

Millimeters, sliced thin



That blunt instrument above is an ordinary pencil point. It's pointing at a reticle, made on a Kodak High Resolution Plate. This reticle fits into the eyepiece of an optical instrument, and is rather fine as reticles go. But to these special plates of ours, which will resolve more than 1,000 lines per millimeter, it's as coarse as the scale on a carpenter's rule.

(To visualize a resolving power of 1,000 lines per millimeter, take the ½mm period on this sentence and chop it into about 1,000 slices spaced out to make 1mm.)

You notice we say "more than" 1,000 lines per millimeter. Truth is, we have never been able to devise a situation that drives these plates to their limit. It's too difficult to form and lay down an optical image that fine. The width of each line and space would equal the wavelength of blue light near the limit of human vision!

Kodak High Resolution Plates are of no earthly use to anybody shooting a still life for a salon. They have extreme contrast, and are only about 1/20,000 as fast as Kodak Tri-X Roll Film. We recommend that for normal use you choose Tri-X (or Kodak Royal Pan or Plus-X) and save yourself a lot of time. But we thought you ought to know that Kodak can make emulsions so high in resolving power that even a Kodak Ektar Lens can't squeeze all the juice out of them. And with grain so fine you can't even find it under an ordinary microscope.

Quick and timely

▶ It seemed to us that stereo cameras and viewers are so essential to each other they might as well go in one package. You can now get a handsome Kodak Stereo Outfit, including the Kodak Stereo Camera and Kodaslide Stereo

Viewer I, for $97.25. A splendid gift for yourself, your best girl friend or favorite wife, or your boy or girl in college.

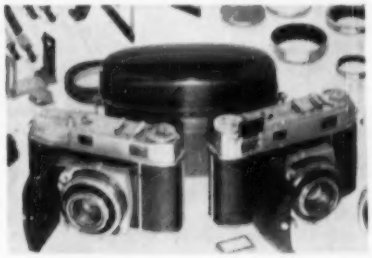
▶ We heard about a tax assessor in New Jersey who is making a complete file of Kodachrome transparencies covering all the houses in his jurisdiction. It helps make comparisons and analyses (and settles a lot of arguments). Maybe you can use Kodachrome shots of your house to settle arguments with *your* tax assessor. And we'll bet color slides can have a use in your business—whatever it may be.

▶ Now you can get Kodak Ektalure Paper F (glossy) in both single and double weight—and that's a good thing, too. Here's a top-quality medium-speed enlarging paper, same basic type as Kodak Opal but twice the speed, in the best surface for maximum detail and subject texture and maximum tonal scale. Tones beautifully; has great response to manipulation and special processing techniques. Get some; you'll like it. The double weight is best for large prints, especially those to be mounted.

▶ A shoe box will very nicely hold a vacation film-processing laboratory that lets you process the day's shooting the same evening. All you need is a Kodacraft Roll Film Tank ($2.95), a 55¢ Kodak Darkroom Thermometer, a few 25¢ Kodak Tri-Chem Packs and you're in business. Add a $1.95 Kodacraft Printing Frame and a $1.95 Rocker Tray Set, and you can make some prints to send back home at the same time. (With a $9.95 Kodak Day-Load Tank, a Kodak Ektachrome Processing Kit, Process E-2, and the $9.35 Kodak Process Thermometer, you can even process your color transparencies on the spot.)

▶ Dunk a photographic print in a tray of Kodak Print Lacquer and it becomes practically waterproof—you can wash it with soap and water. Nice for prints that get a lot of handling. The lacquer dries almost instantly. Can, 8 oz., 78 cents.

▶ What's the basic difference between the new Kodak Retina IIIc and IIc Cameras? The IIIc has an *f*/2 lens, a built-in photoelectric exposure meter, and costs $185. The IIc has an *f*/2.8 lens,



no exposure meter, and costs $135. They take exactly the same auxiliary units, including the same wide-angle and telephoto lens components. And they're almost equally beautiful. Seen them yet? If not, it's high time you did.

▶ Ultra-speed Kodak Tri-X Film is now in 20-exposure 35mm magazines, 85 cents. Also in 120, 620, 127, and 828 rolls.

Prices include Federal Tax where applicable and are subject to change without notice.

Kodak
TRADE-MARK

EASTMAN KODAK COMPANY, Rochester 4, N. Y.

YOU CAN take good outdoor portraits in sunlight

By JOSEPH FOLDES

No squints or frowns when sun is at model's back and reflector distributes light.

Cardboard held at angle by photographer casts reflected sunlight on model's face.

AT ONE TIME or another, probably most of us have taken outdoor portraits of members of our families or of friends—posed facing into the sunlight, with the full impact of the sun's rays hitting the faces of our subjects. And nobody was particularly happy about the resulting prints, which showed squints, pained expressions, and deeply shadowed areas.

Outdoor portraits made in the sun needn't be unsatisfactory, however; the use of backlighting and a reflector will give good results, as you'll find by following the easy technique outlined here.

Pose your model with back to the sun—thus, you and your camera will be facing the sun more or less directly, so be sure to use a lens shade. Set up your camera on a firmly balanced tripod and focus carefully. A white cardboard mounting board, size 16x20 inches, will serve as a reflector, throwing the light back onto the model's face. This supplies adequate lighting to provide a good picture. The photograph accompanying this article (at bottom, right) illustrates the manner in which this cardboard reflector should be held—in front of and at a distance of 2 to 2½ feet from the model's face. It's necessary for the reflector to be held that close in order to furnish the required amount of light. If it appears in the negative it can be cropped out when enlarging.

Now make three exposures on fast panchromatic film (such as Kodak Super-XX, Ansco Superpan Press, or similar) as follows: one exposure for 1/25 second at *f*/5.6; one for 1/50 second at *f*/8, and one at 1/50 second at *f*/11.

Develop your negatives in one of the standard fine-grain developers such as Microdol, FR Super X-33, or Ansco Finex-L (which was used for negatives of the pictures accompanying this article) for 15 minutes at 68 F, agitating frequently. Then fix negatives in hypo containing hardener, wash them for about 35 minutes in running water (approximately 68 F) and hang them to dry.

If you have a condenser enlarger, make your prints on No. 1 or No. 2 paper—use No. 2 or No. 3 paper if yours is a diffusion enlarger. Try to approach the tone and contrast of the example shown at top of this column.

By following the foregoing step-by-step instructions carefully, you should be able to make sunlighted portraits of which you will be justifiably proud.—

If You Use a Box Camera . . .

that has a "B" (bulb) shutter setting (i.e., shutter can be kept open for as long as release button—or lever—is pressed) you can make similar pictures. Camera must be placed on a tripod or other rigid support. Make one exposure with the instantaneous setting, then change to the "B" setting and take two more pictures—one at 1/10 second and the next one at about ¼ second (a quick push and release of the lever will give about a 1/10-second exposure, and a quick push and slower release will approximate ¼ second). Do not approach your subject nearer than the closest distance from which your box camera can take a sharp picture.

8 to 12 hours Delivery ALL OVER U. S. A.

HERE is the NEW EXCITING

NIKON S-2

- Life-Size Rangefinder/Viewfinder
- Rapid, Single-Stroke Film Transport
- High Speed Film Rewind
- Positive Flash-Synch Selector

. . . and Leads of other Features

with 50 m/m NIKKOR F:2 ..... $299.50
with 50 m/m NIKKOR F:1.4 .... 345.00

Highest Trade-In Allowance For Your Present Equipment

FAMOUS NIKKOR Lenses

in Nikon, Canon, Contax, and Leica Mounts

25 mm F:4 Ultra Wide Angle	$169.50
28mm F:3.5 Extreme Wide Angle	149.50
35mm F:2.5 Wide Angle	139.50
35mm F:3.5 Wide Angle	89.50
50mm F:1.4 Standard for Nikon and Contax	169.50
50mm F:1.4 Standard for Leica and Canon	189.50
85mm F:2 Long Focus	175.00
85mm F:1.5 Long Focus	299.50
105mm F:2.5 Telephoto	152.50
135mm F:3.5 Telephoto	135.00
250mm F:4 in Reflex Housing	324.00

When ordering, please specify Nikon, Canon, Contax or Leica Mount.

Just a Few Left

BRAND NEW

NIKON S With Nikkor F:2 lens..... $149.00

NIKON S With Nikkor F:1.4 lens... $188.00

OLDEN

Phone OLDEN-it's Free!

Call New York Murray Hill 4-4285 "COLLECT", all week, Sunday 1-5

QUICK-SET ELEVATOR CHAMPION
3-section Tripod with Panhead. Reg. $34.00 BRAND NEW **$21.95**

TRIPLEX, reg. $17.95. Brand New **$9.95**

EXA
- F:2.8 coc d lens
- MX flash synchro.

reg. $85.00. USED **$44.75**

KINE EXAKTA VX, Tess. 3.5 'T' ctd. disc. brand new. **129.50**

BINOCULARS
6x30 center focus.... **17.35**
7x35 center focus..... **22.50**
8x30 center focus..... **21.50**
7x50 night glass..... **24.50**
all coated, liteweight, shock-proof. Add 10% Fed. Exc. Tax

BRAND NEW
KEYSTONE A-7
16mm Movie Camera 100 foot roll capacity 2.5cm coated lens.
BRAND NEW... **$43.50**

BRAND NEW
IKOFLEX IIA
SAVE $99.00
Zeiss Tessar 3.5 ctd. sync. Reg. Discontinued Model. $176.00
BRAND NEW **$77**

SAVE $21.50
ARGUS C-4
F:2.8 ctd. synch. Rfdr. Disc. Model BRAND NEW **$62.95**
Phone MUrray Hill 4-4285

CONTAFLEX
TESSAR F2.8, SYN.
Automatic Diaphragm
USED **$85.75**

Phone MUrray Hill 4-4285

PACEMAKER GRAPHIC

4x5 Crown F:4.7 Rfdr., brand new **$163.00**

Ann. Speed With Rfdr. Flash	
2¼x3¼ F:4.5 Lens.....	83.95
2¼x4¼ F:4.7 Lens.....	89.50
4x5 F:4.7 Lens.....	96.95
2¼x3¼ Century Graphic..	98.50
Pacemaker Crown 23, F:4.5.	119.50
Pacemaker Speed 45, F:4.7.	169.50
Linhof 23, 3 lenses.....	318.50
Linhof 45, F:4.5.....	226.50
5" Xenon F:2, barrel.....	24.00

BOLEX
H-16 Leader, F:1.9 ctd. $149.00
H-16 Deluxe, F:1.9 ctd. 239.00
H-8 Leader, F:1.9 ctd.. 144.95
H-8 2-lens Turret F:2.8 68.75
All used, in perfect condition
BOLEX STEREO OUTFIT, used.....$86.00

PRAKTICA FX
F:1.9 ctd. pre-set
Reg. $159.00. BRAND NEW **$76.50**
FREE! German Flashgun

35MM CAMERAS	LIST	USED
Argus C3, case & flash.....	66.50	31.50
Canon, Serenar f:1.8, Rfdr...	295.00	136.95
Contessa 35 Tess. 2.8, Rfdr..	142.00	83.75
Contax II Sonnar F.2.....	.....	82.95
Contax IIA, Sonnar F.2.....	336.00	148.50
Contax IIIA, Sonnar F1.5.....	412.00	194.50
Kodak Signet, Ektar 3.5, Rfdr.	75.00	42.95
Leica IIIC, Summitar F:2.....	.....	98.00
Leica IIIF Summicron F:2.....	336.00	177.75
Leica M-3, camera only.....	288.00	.....
Retina IIA, F:2 ctd. autom....	127.50	71.25
Retina IIIC F:2 synch.....	185.00	117.50
Revere Stereo F:3.5 synch....	174.50	74.50

ROBOT 'STAR', XM synch. standard 35mm, F:2.8 ctd. BRAND NEW $89

Robot 'Royal' Xenon F:1.9 Rfdr.	295.00	136.50
Stereo Realist F:3.5 Rfdr.....	139.00	66.25
Voigtlander Vitessa F:3.5 Rfdr.	99.50	62.95
Voigtlander Vitessa 'L' F:2...	159.00	97.00
Voigtlander Prominent F:1.5..	270.00	136.50
Zeiss Super D, Biotar F:2....	.....	92.75
REFLEX & ROLLFILM	LIST	USED
Exakta 66, Tess. F:2.8, Latest	319.50	179.50
Hasselblad 1000F, F:2.8....	379.50	199.50
Rolleiflex Auto, Xenar F:3.5..	.....	74.95
Rolleiflex Auto, Tessar F:3.5..	.....	86.95
Rolleiflex Auto Xen. 2.8 'XM'.	309.50	176.00
Rolleicord V MX Xenar 3.5..	134.55	88.50
3¼x4¼ Super D Graflex...	289.50	99.00
Kodak Medalist, Ektar 3.5 Rfdr	.....	53.95
Kodak Medalist, II, Ektar 3.5	.....	106.00
Minox III, F:3.5 ctd.....	119.00	78.95
Polaroid 95, 3¼ x 4¼.....	89.75	39.50
Super Ikonta A, Tess 3.5.....	99.00	43.00
Super Ikonta B, Tess 2.8.....	139.00	64.75
Super Ikonta BX, Tess 2.8....	163.00	89.00
ELECTRONIC FLASH		
Mighty Lite, AC-unit.....	84.50	34.95
Mighty Lite, batteries.....	69.50	43.50
Circular Close-up attach.....	39.50	23.75
DeJur Babyblitz.....	39.50	.....
FR. dry-cell batteries.....	54.50	33.95
Dormitzer, DBI, batteries.....	115.95	67.50
Heiland V. batteries.....	119.50	57.00
Heiland VII, latest, AC.....	69.50	.....
Ultrablitz IIM.....	69.95	36.75
MOVIE CAMERAS & PROJECTORS		
B&H 220, 10mm F:2.5.....	49.95	26.75
B&H Tri-lens, F:2.5.....	129.95	67.55
Cine Kodak Mag. 8, F:1.9...	149.50	86.90
Kodak Brownie F:2.7.....	37.50	19.50
Revere 50, F:2.8.....	49.50	23.25
Revere 80, F:2.5.....	97.00	43.95
Revere 84, Turret, F2.8.....	122.50	46.00
B & H Filmo 70-DL, F1.9.....	364.95	218.00
Cine Kodak Mag. 16, F:1.9..	.....	54.95
Super Pathe 16, F:1.9.....	510.00	218.00
B&H 253, 500W, case.....	79.95	47.50
B&H 'Regent' 500W, case...	179.95	102.75
Kodak Brownie, case.....	62.00	37.50
Revere 85, 500W, case.....	124.50	56.95
Keystone K-161-V, splicer, case	159.50	84.75
Revere Sound projector.....	325.00	163.00
B & H Filmosound 285-C....	449.95	249.50
B & H 202, Magnetic Sound..	719.00	444.00
MOVIE LENSES	8mm	SPECIAL!
9mm F:2.7 W.A. for Kodak Mag.	23.75	.....
7mm Wide Angle F:2.5 coated	.....	19.25
6mm Wide Angle F:1.9 coated	.....	27.50
1" F:3.5 coated.....	.....	7.50
1½" Telephoto F:3.5 coated.	.....	8.25
12, 7mm Wollensak F:1.5 W.A.	16mm	89.95
17mm Elitar F:2.7 W.A.....	.....	23.50
2" Kodak F:1.6 Telephoto....	.....	64.75
3" Elitar F:2.5 Telephoto.....	.....	27.50

HASSELBLAD
2¼x2¼ Reflex focal plane shutter, 1-1/1000 EKtar F:2.8 ctd. pre-set. 'MX' synch., Used..... **$199.50**

EXPOSURE METERS
BRAND NEW DEM. MODELS

BEWI AUTOMAT, reg. 29.50...	$19.75
G. E. D. W. 68, reg. 24.50....	18.25
G. E. PR—1, reg. 32.50.....	23.95
NORWOOD DIR. reg. 32.95...	23.95
NORWOOD M3, reg. 16.95...	12.75
SIXTOMAT X-3, reg. 29.95....	19.75
WESTON MASTER II, reg. 29.95	22.40

BRAND NEW
RICOHFLEX VI
- 2¼ x 2¼ Reflex
- F:3.5 ctd. lens
- synchro shutter

BRAND NEW **$18.75**
Ricohkin 35mm attachm $9.75

BRAND NEW
VOIGTLANDER VITO II
- Color-Skopar F:3.5 ctd.
- Prontor 'X' Synchro Shutter
- Built-in Selftimer

Reg. $54.50 ..... **$28.50** BRAND NEW

BRAND NEW
AUTO-FLEXARET
- 2¼x2¼ Reflex, Autom. Filmtransport
- F:3.5 coated Lens
- Synchro shutter, 1—1/300
- built-in selftimer
- Direct sports finder

reg. $99.50 SAVE $51.50 BRAND NEW **$48**

BRAND NEW
DITTO '99'
- Rapid sequence 35 mm
- F:2.8 ctd. lens
- MX synchro shutter. Reg. $99.00

SAVE $51.00 BRAND NEW **$48**

BRAND NEW
AUTO ROLLEIFLEX 1954 MX MODEL
with Xenar F:3.5 ctd..... **$138.50**
with Tessar F:3.5 ctd..... **$148.50**

BRAND NEW
BOLSEY B THREESOME
with case and flash **$29.95**

OLDEN CAMERA & LENS CO.
1265 BROADWAY at 32nd STREET . . . . NEW YORK 1, N.Y.

O·M·A APPROVED

ALL CAMERAS SHIPPED 10-DAY MONEY BACK GUARANTEE

I am interested in _____

I wish to trade the following _____ PLEASE MAIL FREE QUOTATION

NAME _____

ADDRESS _____ CITY _____ STATE _____

By LLOYD WEST

Your color exposures will be more accurate if you use a

Neutral gray card

Meter is read while pointed at the card held in front of subject, facing camera.

TO A GREAT EXTENT, the success of your color shots depends upon accurate exposure, which influences not only the overall darkness or lightness of the transparencies, but their color quality as well.

Many people have an idea that there is no problem to exact exposure for color shots—that they can depend entirely upon an exposure meter to prevent mistakes. This is not always the case, however. The exposure meter is a necessary and reliable tool for color shots, but when using a reflected-light type meter, there are many instances where its use in the usual manner will not result in a well-exposed transparency.

For example, readings from this type of meter are likely to be inaccurate in such instances as the following: (1) when the subject is rather small and there is a difference in brightness of background and that of subject; (2) when the subject cannot be approached for a meter reading; (3) when the subject just isn't there for a meter reading before you actually take the picture (as in sports events); (4) when the level of illumination is so low that it hardly moves the needle of the meter.

For these and similar situations, there is a remedy—the neutral gray test card made by Eastman Kodak Company. These cards are available at most photographic supply shops; they are about 8x10 inches in size, gray on one side and white on the other.

Here's how this neutral gray test card can help to get accurate meter readings in the specific instances mentioned. (1) When small objects are photographed, the proper exposure is not indicated by the meter— (*Continued on page* 102)

Four situations where a gray card helps.

1 FOR SMALL OBJECTS
In photographing these small objects, any overexposure and resultant "washing-out" of detail and highlights were avoided by taking the meter reading from card.

2 FOR DISTANT OBJECTS
If the meter had been turned toward subject for this picture, the expanse of sky would have caused underexposure. Using test card gave successful result.

3 ACTION SHOTS
To photograph this water skier as he flashed by at 35 mph, meter reading was made from gray card in advance of the subject's appearance.

4 IN DIM LIGHT
For this shot, made in museum where the level of illumination was very low, white side of card facilitated accurate exposure reading.

BROOKS

New 1955 Trade-Ups

LEICA IIIF, $49.95 plus your old LEICA IIIF (red dial)
ROLLEIFLEX 1955, $77.50 plus your old Rolleiflex MX, ROLLECORD V, $49.25 plus your old Rollecord IV.
MINOX IIIS, $48.90 plus your old Minox III.
Fully Synchronized CONTAX IIA & IIIA $69.00
IIA for IIA or IIIA for IIIA
EXAKTA VX ..... $43.30 plus your old EXAKTA VX
RETINA IIIC ..... $80.30 plus your old RETINA IIA
NIKON S-2 ..... $97.50 plus your old NIKON S
CONTAFLEX II w/meter ..... $68.95 plus your old CONTAFLEX

New—Discontinued 1954 Models

New VX Exakta w/f/2.8 Preset Tessar $169.00
New VX Exakta with f/3.5 Tessar lens 149.00

	Reg.	NOW
Exakta penta prism w/rf	$ 85.00	$ 38.95
Flexaret Synch. f/3.5	99.50	48.95
Ditto Camera f/3.5	99.50	48.00
Ditto Case	6.95	5.95
105mm Ditto Telephoto	39.50	29.95
Bolsey B2 f/3.2 lens	56.50	39.95
Bolsey B22 Setamatic f/3.2 lens	69.50	44.95
Bolsey C reflex f/3.2 lens	89.50	49.50
Contax IIA f/2 X. synch	336.00	229.00
Contax IIIA f/1.5 X. synch	412.00	296.00
Super Ikonta A f/3.5 Tessar X. synch	99.00	69.00
Super Ikonta B f/2.8 Tessar X. synch	139.00	99.00
Nikon 1954 Model, w/f/1.4 Nikkor	299.50	189.00
Robot Star f/1.9 lens	249.00	99.00

Many others—write for complete list.

CONTAX D

Contax D with f/2.8 preset Tessar	$ 94.95
Contax D w/f/2 preset Zeiss	124.95
Eveready case	12.00
Praktica FX f/1.9 preset Meyer	78.95
Praktica FX f/2.8 preset Tessar	78.95
Case	8.95

BOLEX H-16 LEADER

Tri Focal Viewfinder, turret head for 3 lenses. 25mm f/1.9 Lytar ctd. lens $269.50
Bolex H-16 Supreme camera f/1.9 ..... $394.00

NEW BOLEX PAN CINOR ZOOM LENS for 8mm cameras, 12.5 to 36mm, f/2.8 C mount, focusing down to 2½" cpld. vf. $219.50

BOLEX 16mm Zoom lens, from f/2.8 ..... 20-60mm $349.50
Model 70- 17.5mm-70mm 449.50
Model 100—25mm-100mm 750.00
Bolex motor 77.50
16mm W.A. f/1.8 Switar 99.50

16MM SPECIALTIES

New Zoomar 16 lens, 1 to 3-in. f/2.8 ..... $600.00
New B & H Anamorphic Lens for wide screen movies $596.00
New B & H 70H f/1.9 ..... 625.00
New 400 ft. magazine for above 162.50
New Motor for above, 8 to 64 frames 142.00
Bell & Howell 1 in. 0.95 lens "C" mount $269.50
Bell & Howell 10mm W.A. f/1.8 "C" mount $124.50

LINHOF

Linhof 2¼ x 3¼ Camera—Complete 3 Lens Outfit Super Technika 2¼ x 3¼ Camera, 65 f/6.8 W.A. Angulon Lens, 105mm f/3.5 Schneider Xenar Normal Lens, 180mm f/5.5 Tele-Xenar Telephoto Lens. All in full synch. Compur Rapid Shutter to 1/500 sec. All lenses coupled to rangefinder $569.90

Same as above, with 105mm f/2.8 Xenotar, W. A. and Telephoto $663.70

LINHOF 4 x 5 SUPER TECHNIKA

Multifocus Rangefinder—Tilting and Swinging Back—Revolving Back—Triple Extension Bed—Drop Bed— All Lenses Coupled to Rangefinder—And NOW NEW UNIVERSAL BACK and Exlalite Screen. (Accepts Polaroid, Grafmatic, and Roll Film Holders.)

4 x 5 LINHOF OUTFITS — Price below, includes camera with lenses (✔). With full synch. MX Shutters up to 1/500 sec. Coated—Other combinations on request.

4 x 5	135mm f/3.8 Press Xenar	150mm f/4.5 Xenar	150mm f/2.8 Xenotar	90mm f/6.8 Angulon	240mm f/5.5 Tele Xenar	Price
One lens Outfits	✔					$429.70
		✔				$419.70
			✔			$629.25
Two lens Outfits	✔			✔		$515.15
		✔		✔		$505.15
			✔	✔		$714.70
Three lens Outfits	✔			✔	✔	$635.60
		✔		✔	✔	$635.60
			✔	✔	✔	$845.15

CARL ZEISS TESSAR LENSES

105mm f/4.5 MX	$ 66.00
105mm f/3.5 MX	85.00
135mm f/4.5 MX	90.00
150mm f/3.5 X-synch	150.00
150mm f/4.5 MX	99.00

SCHNEIDER TELE XENAR LENSES

240mm f/5.5 MX sync.	$119.95
360mm f/5.5 X sync.	189.95
270mm f/5.5 X sync.	149.95

West's Largest Selection—Budget Terms Available

NEW ARRIFLEX 16

The only 16mm camera providing through-the-lens focusing and viewing during exposure, electric motor drive. Matte box, cables $1650.00

16mm Xenon f/1.9 lens	170.00
25mm Xenon f/1.5 lens	170.00
75mm Xenon f/2 lens	200.00
Zoomar Lens 1" to 3" f/2.8 for Arriflex	$79.00

ROLLEIFLEX and ROLLEICORD

with new coupled shutter diaphragm

w/Tessar f/3.5 lens	$232.50
w/Xenar f/3.5 lens	217.50
Rolleiflex Schneider Xenotar f/2.8 lens or w/Zeiss Planar lens f/2.8	291.50
Rolleicord V w/Xenar f/3.5 lens full synch. light value	$134.95
Case for 2.8C	18.00
Case for 3.5	17.00
Rollei Flash Gun	29.95
Rollei Exchange New Camera with light values for your camera MX	$77.50

1955 SPEED GRAPHIC

Brand new features of the 1955 Speed Graphic include Graphic coupled rangefinder with built-in Rangelite and automatic parallax-correcting optical viewfinder.

4 x 5	Crown Graphic	Speed Graphic
w/135mm Optar f/4.7 MX 1/400	$287.45	$331.45
w/135mm Tessar f/4.5, MX	245.00	289.00
w/127mm Ektar f/4.7 MX	268.45	313.45
w/150mm Tessar f/3.5 Sync.	295.00	339.00
w/150mm Xenar f/4.5 MX 1/400	249.50	294.50
w/152mm Ektar f/4.5 X sync. 1/200	293.45	347.45
4 x 5 w/135mm Xenar f/4.7 MX 1/400 Kalart R.F.	209.95	249.50

2¼ x 3¼

2¼ x 3¼ w/105mm Color Scopar f/3.5 Kalart R.F.		
w/1/400 of sec. MX sync.	199.50	229.50
w/101mm Ektar f/4.5 MX 1/800	297.55	336.05
w/105mm Tessar, f/3.5 Mx	245.00	289.00
w/101mm Optar f/4.5 MX 1/400	279.85	318.35

NEW PRESS CAMERA ACCESSORIES

	Regular	Special
4 x 5 Lisco Holders	$ 4.25	$ 2.99
23 Roll Film Holder for 2½ x 3¼	21.75	17.20
23 Grafmatic Film Holder for 2¼ x 3¼	17.95	14.40
23 or 22 Roll Holder for 4 x 5	23.95	19.20
45 Grafmatic Film Holder for 4 x 5	24.95	19.95
Graflarger Stand	19.95	16.95

SWEDISH HASSELBLAD 1000F

. . . 2¼ x 2¼" single lens Reflex Camera, interchangeable roll film magazines, automatic shutter setting with either 80mm Ektar f/2.8 or 80mm Zeiss Tessar f/2.8 ..... $379.50
New extreme wide angle Hasselblad w/38mm Biogon f/4.5 ..... $489.50
Finder 49.50
Hasselblad Bellows for closeup work $115.00

LENSES:

135mm Ektar lens f/3.5	$285.00
250mm Sonnar f/5.6	299.50
250mm Sonnar f/4	389.00
Zeiss W.A. Distagon f/5.6 with case	$189.50

EXAKTA

New 1955 Exakta VX

EXAKTA VX with waist level finder.

Exakta VX w/f/1.9 Schneider Xenon fully auto lens	$351.70
Exakta VX w/f/2 Westagon, fully automatic	$289.50
Exakta VX w/f/2.8 Westanar fully auto lens	$239.50
Exakta VX w/auto Biotar f/2	$357.00
Exakta VX w/auto f/2.8 Tessar	$279.50

LEICA

Trade up to a Leica M3

Leica M3 with Summarit f/1.5		$468.00
Leica M3 with Summicron f/2 lens		447.00
Leica M3 with f/3.5 Elmar lens		348.00
Leica M3 body		288.00
Leica IF body, built-in flash		64.80
Leica IIF body, built-in flash		120.00
Leica IIIF body, built-in flash		180.00
Leica IIF with f/3.5 Elmar		177.00
Leica IIIF with f/2 Summicron		336.00
	M3	Standard
35mm Summaron f/3.5	$ 99.00	$ 98.00
50mm Elmar, ctd. f/3.5	60.00	57.00
50mm Summarit, f/1.5	180.00	177.00
50mm Summicron f/2	159.00	156.00
85mm Summarex, f/1.5, Chrome		360.00
90mm Elmar f/4, Chrome	93.00	90.00
90mm Elmar f/4, Chrome, Collaps, mt.	150.00	
125mm Hektor, f/2.5		147.00
135mm Hektor, Chrm., f/4.5	141.00	135.00
135mm Hektor sht. mtd.	121.50	120.00
Leica Meter	30.00	17.50
Omnica Case		60.00
200mm Telyt, f/4.5		156.00
400mm Telyt, f/5		450.00
Leica reflex housing		102.00
300mm Kilar f/5.6		149.95
400mm Kilar f/5.6		239.95
Leica flash gun		24.00
Leica Chico flashgun	19.50	18.00
Stereo Outfit for Leica	297.00	294.00
Omnica case for	60.00	60.00

ASTRO LENSES

	Cine Cameras (Standard)	Exakta* Pentacon*	Still Cameras (Standard)	Hasselblad	Leica Price incl. Identoscope
125mm (5") f/2.3 Pantachar	$ 195	$ 220	$ 195	$ 220	
150mm (6") f/2.3 Pantachar	275	300	275	300	$ 425
150mm (6") f/1.8 Pantachar	345	370	345	370	495
300mm (12") f/5 Fernbild	195		195	220	345
300mm (12") f/3.5 Telastan	395	420	395	420	545
400mm (16") f/5 Fernbild	245	270	245	270	395
500mm (20") f/5 Fernbild	395	420	395	420	545
640mm (25") f/5 Fernbild	725	750	725	750	875
800mm (32") f/5 Fernbild	895	920	895	920	1,050
1000mm (40") f/6.3 Fernbild	1,100	1,125	1,100	1,125	1,250

*Specify which mount required.

BROOKS Cameras
45 KEARNY at MAIDEN LANE
TELEPHONE EXbrook 2-7348
SAN FRANCISCO, CALIFORNIA

BROOKS CAMERAS, Dept P — 45 Kearny Street, San Francisco, Calif.
Please ship the following immediately: .....
Enclosed is $ ..... ☐ Complete Payment ☐ Down Payment.
I agree to pay $ ..... monthly for ..... months until merchandise is paid for.
I wish to trade in: .....
☐ Mail me tentative allowance.
☐ I am shipping equipment for appraisal.
Your trade-in may be used as down payment! It will be returned at our expense if you don't accept our top offer.
☐ Send FREE literature on .....
☐ Send FREE buying guide.
☐ Professional Movie List.
Name .....
Address .....
City or Town ..... State .....
MAIL TODAY

Neutral Gray Card (Continued from page 100)

because it is affected to a greater degree by the background area than by the subject. A dark background will cause too low a reading, resulting in an over-exposed subject on the transparency—a light background tends to produce underexposure of the subject. For such shots, hold the card in front of the subject, with gray side facing the camera, point your exposure meter at the card from a distance of not more than four or five inches, then take a meter reading. Care should be used to keep from casting a shadow on the card—either with your hand or with the meter.

(2) There are times when you cannot approach the subject to take a meter reading. An example of this situation is shown in the photograph numbered 2, accompanying this article. The shot was made from the roof of a tall building; the exposure meter could not be turned toward the subject of the picture for a reading, because the great expanse of sky would have caused a reading that was too high. The result would have been a loss of shadow details (underexposure) in the transparency. Taking the reading from the gray card, however, produced a well-exposed color shot. Here, the card should be held in camera position, in the same type of illumination as that received by the subject—that is, if the subject is in sunlight, the card would be held in sunlight; if the subject is in shade, the card is held in shade. And always with the gray side facing the camera.

(3) There are times when the subject isn't around for a reading to be made. This occurs in such situations as sports events, many action shots, at rodeos, or in similar instances where you have selected a spot from which to take your pictures. You know when the action you want to photograph will take place, but the subject hasn't appeared in the spot you've selected, and you know that when it does appear you may have just time to make one quick exposure before subject passes out of range. Obviously, in such a situation it would be impossible to take a meter reading at time of action, but you can take a preliminary reading of the exposure meter from the gray card, while awaiting the appearance of the subject. Make sure that the card is held in the same illumination as that to be received by the subject, turn card toward camera and make your reading.

An example of this technique is illustrated in photograph No. 3, which shows a water skier who was flashing by at about 35 miles an hour. Exposure meter reading had been made from the gray card, in advance, the camera was set accordingly, and a satisfactory action shot was achieved.

(4) When the level of illumination is so low that the needle of the exposure meter hardly moves, it is difficult to calculate the exposure accurately. Here again, the neutral test card will be of help, but in this situation it should be held in front of the subject with *white* side turned toward the camera. The white side reflects exactly five times the quantity of light reflected by the gray side, which of course gives the exposure meter five times as much light to register. When the exposure is calculated from that reading, it should be multiplied by five for the actual exposure, to assure greater accuracy at low levels of illumination.

When photographing brightly colored (light) subjects, exposure meter reading taken from the gray card as it is can be used. For average subjects, the camera should be set according to the reading, and lens then opened up a half stop for the actual exposure. For moderately dark subjects it should be opened one full stop, and for really dark subjects, 1½ stops. This information is supplied here merely as a tentative guide to begin with. A little practice with the neutral test card will enable you to judge results and adjust your lens opening most accurately according to brightness of subjects. The accompanying table will prove helpful in this connection.

When Subject Is	Meter-Indicated Exposure Taken off Gray Card Is to Be Increased by
Light	No increase.
Normal	½ stop.
Rather dark	1 stop.
Dark	1½ stops.
Very dark	2 stops.

Indicated meter exposure taken from the white side of the card (in dim light) is to be increased 5 times, then adjusted according to the table above.

There are other advantages to be gained from the use of this neutral test card. The instruction sheet supplied with the card lists them in detail.

One of the most satisfactory aspects of its use as described is the reliability of the results. It is difficult to standardize your procedure if you take your reflected-light exposure meter readings directly from the subjects of your pictures. There are so many variable elements that you cannot have any assurance of getting good results constantly. But the neutral test card is always the same, and its use enables you to repeat standard results consistently.—

Call Us COLLECT!

MUrray Hill 2-0866

Reverse Charges from anywhere in U.S.A. For the lowest prices on Cameras, Lenses, and Accessories — Buying or Trading anything photographic—Find Out For FREE at Grand Central Camera!

Sale! Fresh Film **Kodak**

Latest 1956 Dating

	List	Special
Kodachrome—35mm 20 Exp	$3.25	$2.49
Kodachrome—35mm 36 Exp	4.95	3.79
Kodachrome—8mm Mag.	4.65	3.59
Kodachrome—8mm Roll	3.75	2.89
Kodachrome—16mm Mag	6.95	5.35
Kodachrome 16mm 100'	10.40	7.99
Kodachrome Stereo	4.65	3.59
Kodachrome 828	1.95	1.43

(Original Packaging, No Reloads)

Most Versatile Meter You Can Own!

BROCKWAY *m-2 model*

NORWOOD EXPOSURE METER *Director*

Trade Mark

Measures **incident** light—the **right** light for the right exposure. Exclusive 3-dimensional Photosphere . . . scale ranges for all movie, still films . . . head rotates, scale always faces you . . . slide for direct reading with color film, Photogrid for brightness, range control, Photodisk for contrast control, balancing studio lights, etc. included. Accessory slides available for direct reading with other films.

Order Your M-2 Today! 32.95

complete fully guaranteed

Need Time To Pay?

ASK ABOUT GRAND CENTRAL'S

10% Down

"EASY PAYMENT PLAN"

Find Out for FREE! GRAND CENTRAL Gives MOST for LEAST!

HIGHEST CASH PRICES PAID for your Cameras, Lenses and Equipment. Your used equipment can serve as Part or Down Payment.

For Immediate Service
CALL US COLLECT
MUrray Hill 2-0866

1. 30-Day Absolute Money-Back Guarantee!
2. Written Full Year Guarantee!
3. 5 Year Service Guarantee!
4. Postage Free Shipments under 5 lbs.

CONTAX-D PENTACON

with 58mm f2 C. Zeiss Biotar P.S. 122.50

35mm Single Lens Reflex Praktica FX

Latest Model
Fully Synched

with Carl Zeiss Tessar f2.8 Coated Lens (169.50 Value)	75.00
with f1.9 Coated Meyer Trioplan	67.00
with f3.5 Coated Tessar	69.00
with Carl Zeiss Biotar f2	99.00

New Slide Projector Value!

Brand New 2x2 Famous Make 300 Watt Blower Cooled Slide Projector. (We are not allowed to mention the name.)

WITH FULLY AIREQUIPT AUTOMATIC SLIDE CHANGER AND GOOD-LOOKING CARRYING CASE. Reg. 59.50 — 37.50

Used Slide Projector Buys

	Reg.	Spec.
T.D.C. Mainliner 300W B.C. Selectron	59.50	29.95
Golde Manumatic 300W B.C.	56.50	25.00
LaBelle 55 500W B.C. Automatic	95.00	53.00
T.D.C. Headliner 300W B.C. Selectron	49.95	28.95

ARGUS C-3

with case and flash
reg. $66.50

SAVE special USED $29.95

ZEISS CONTAFLEX

35mm Automatic, Carl Zeiss Tessar f2.8 Lens, MXV Shutter, Self Timer, Reflex Focusing	NEW	USED
	$169.50	$86.50
Contaflex II	199.00	
Zeiss Telephoto Lens for Contaflex	99.00	79.00
Stereo Attachment for Contaflex	49.00	

BOLEX H16 CAMERA OUTFIT

Complete with 3 lenses at a low, low price.

USED $199.50 Comp

LENSES:
15mm f2.8 Wide Angle
25mm f1.9 Normal Angle
75mm f1.9 Telephoto

- Automatic Threading
- Built in Frame Counter
- Single Spockets for Sound

Other Bolex cameras plus hundreds of lenses and accessories in stock. Write for FREE Price List.

BOLEX STEREO OUTFIT, used . . $86.00

NIKON

Brand New, Factory Guaranteed f1.4 Nikkor coated lens, MX Synch., disc. model . . . $188.00
Nikon Camera body, Brand New 94.00

BRAND NEW

35mm CAMERAS

	NEW	USED
Argus A 4		$18.50
Argus C 2 f3.5 RF		17.50
Argus C 4 f2.8 RF	$84.50	42.50
Bolsey B 2	69.50	32.50
Kodak 35 f3.5 RF		28.50
Kodak Retina II f2 RF		57.00
Kodak Retina IIA f2 RF	127.50	72.50
Kodak Signet f3.5 RF	75.00	43.50
Vitessa f2 RF	127.50	82.50
Prominent f2 RF	220.00	129.50
Prominent f1.5 RF	-295.00	149.50
Graphic 35 Case, Flash	89.50	54.50

Selected REFLEX Cameras

	NEW	USED
Ciroflex B		$19.95
Ciroflex D		34.50
Exakta 66 f2.8	$319.50	182.50
Hasselblad f2.8	379.50	199.50
Ikoflex VI f3.5	44.95	19.95
Rolleicord V f3.5	134.55	94.50
Rollei Auto Latest f3.5 Tessar	232.50	124.95
Rollei Auto 28C	291.50	179.50

ROLL FILM Cameras

Kodak Chevron f3.5	$198.50	$139.50
Kodak Medalist I f3.5		55.00
Kodak Medalist II f3.5	304.75	110.00
Polaroid Highlander	69.96	39.95
Polaroid Speedlight	89.75	37.50
Polaroid Pathfinder	$249.50	$147.50
Zeiss Super Ikonta A	99.00	49.50
Zeiss Super Ikonta B	139.00	64.50
Zeiss Super Ikonta C	114.00	49.50
Zeiss Super Ikonta BX	163.00	79.50
Voigtlander Bessa II f3.5 RF	124.50	67.50

Zeiss Contax

BUILT-IN FLASH SYNC.

	NEW	USED
Contax IIA Sonnar f2	$336.00	148.50
Contax IIIA with Sonnar f1.5	412.00	199.50

Kodak Retina IIC and IIIC

	NEW	USED
Retina IIC	$165.00	$105.00
Retina IIIC	185.00	119.50
Retina Longar 8mm F4	82.50	59.50
Retina Courtar 35mm F2	62.50	42.50
Retina Finder		12.95

Selected PRESS CAMERAS

We have in stock the newest Speed Graphic and Linhof cameras and the choice of hundreds of lenses for Press Cameras, and View Cameras, at bargain prices. Ask for our quotation on lenses and accessories.

	NEW	USED
23 Graphic f4.5 with R.F. and Acc.		$ 69.50
34 Graphic f4.7 with R.F. and Acc.		79.50
45 Graphic f4.7 with R.F. and Acc.		89.50
23 Linhof Complete Three Lenses	569.90	319.50
45 Linhof Super Tech. f4.5	389.75	199.50

ROBOT ROYAL

with rangefinder
Makes 8 Exposures a second.
NOW $189.50

Exakta

Latest 1955 Model, with 50mm Zeiss Tessar f3.5 — $127.50
with 50mm Zeiss Tessar f2.8 — 143.75
with 40mm Makro-Kilar f3.5 4" to infinity — 199.95
with 40mm Makro-Kilar f3.5 2" to infinity — 234.00

BRAND NEW DISC. MODEL

with 50mm f2.8	$129.95
with Meyer Primoplan 50mm f1.9 pre-set	184.50
with Carl Zeiss Biotar 58mm f2 pre-set	179.50
with Angenieux 50mm f1.5 pre-set	219.50
with 50mm f1.9 Schneider Xenon fully automatic	239.00
with 50mm f2.8 Westanar fully automatic	169.50
with 50mm f2 Westagon fully automatic	187.50
with 58mm f2. Biotar fully automatic.	$249.50

Above cameras with waistlevel finders—Same cameras can be delivered with Pentaprism and rangefinders by adding $25.00 to the above net prices.

FULLY AUTOMATIC—SINGLE LENS REFLEX CAMERAS

Finest Cameras Ever Made—Latest 1955 Model Used Cameras
WITH BRAND NEW LENSES—Latest Models—Fully Guaranteed

	Automatic Westanar f2.8	Automatic Tessar f2.8	Automatic Westagon f2	Automatic Biotar f2	Automatic Xenon f1.9
Exakta VX	174.50	192.50	224.50	244.50	249.50
Pentacon	109.50	— —	129.50	— —	202.50
Exa	84.50	112.50	104.50	150.00	164.50
Praktica	74.50	— —	129.50	— —	184.50
Alpha 7	— —	— —	— —	— —	304.50

Due to our big trade-in and exchange business, we have a large selection of used Exakta I, Exakta II, Exakta V, Exakta VX, Exa, Contax D, Pentacon, with various lenses in stock. All are in perfect condition, including guarantee for one year—all priced for quick turnover sales.
We have thousands of lenses for Exakta, Exa, Contax S, Contax D, Praktica, Praktiflex, Pentacon, Hexacon, Rival. Ask us for our Bargain Price List.

Leica

Full M-X Synchronization
Combined RF & Viewfinder
Viewfind. adj. all lenses
Patented Quick-Change MI
- All Speeds on One Knob
- Rapid Wind Lever
- Delay Action Mechanism
- Open Hinged Back

Completely New M-3

LEICA M3 f3.5 Elmar M	348.00
LEICA M3 f2 Summicron M	447.00
35mm Summaron f3.5M W.A.	99.00
90mm Elmar f4M Tele.	93.00
135mm Hektor f4.5M Tele.	141.00

LEICA SPECIAL SALE

	USED
Leica IIIC, 50mm Summitar	87.50
Leica IIIF, f2 Summitar	135.50
Leica IIIF, 50mm f2 Summicron	167.50
Leica IIIF, f1.5 Summarit	175.50

Other Leica cameras and hundreds of lenses and accessories in stock.

MOVIE CAMERA SALE

The price of each of the following used listed movie cameras includes the normal lens that comes with the camera, and also a Brand New 7mm f2.5 wide angle lens, and a Brand New 38mm f1.9 telephoto lens for the 8mm cameras, or a Brand New 17mm f2.7 wide angle lens, and a Brand New 3" f3.5 telephoto lens for the 16mm cameras. Camera and lenses are fully guaranteed. Here is a **complete** movie outfit at a sensationally low price!

8mm		16mm	
Keystone K35	89.00	Keystone A12	157.50
Keystone K45	122.00	Keystone A15	179.50
Dejur Embassy	133.95	Keystone K56	168.00
Dejur Fadematic	127.50	Bolex	199.00
Bell & Howell 134TA	109.95	Bell & Howell 200A	169.50
Bell & Howell 172A	112.50	Bell & Howell 200T	199.00
Kodak 8-90	149.50	Bell & Howell 70DL	299.00
Bolex B8	99.50	Kodak K100	239.00
		Pathe	390.00
		Wollensak	187.50

8mm MOVIE CAMERAS • 16mm MOVIE CAMERAS

ALL BRAND NEW, LATEST MODELS

We are making available for the first forty purchasers of any one of the cameras below—One of the Ednalite Dual Lenses—List Price $24.95 for the special net price of $1.00. This revolutionary lens system will fit any of the cameras below and is a telephoto and wide angle lens at the same price. The price of $1.00 includes lens adapter, leather carrying case, and a lifetime guarantee.

New 8mm Cameras		New 16mm Cameras	
Keystone K25 Capri f2.5	49.95	Bell & Howell AutoLoad f2.5	174.95
Keystone K30 Capri f1.9	59.95	Bell & Howell 70DL f2.5	341.50
Keystone K32 Olympic f2.5	79.95	Bolex H16 Leader f1.9	269.50
Keystone K41 Bel Air f2.5	89.50	Wollensak 91 f1.9	187.50
Keystone K41 Bel Air f1.9	99.50	Kodak Royal Mag. f1.9	169.50
Wollensak Roll f1.9	124.50	Kodak K100 f1.9	269.00
Wollensak Magazine f1.9	139.50	Kodak K100 f1.4	369.00
Bell & Howell Companion f1.9	109.95	Keystone A9 f2.5	99.50
Bell & Howell Sportster f1.9	119.95	Keystone A12 f1.9	159.50
Bell & Howell Auto 8 f2.5	134.95	Keystone A15 f1.5	199.50
Dejur Citation f1.9	89.50	Keystone K51 f2.5	129.50
Dejur Embassy f2.5	106.95	Keystone K56 f1.9	175.00
Dejur Fadematic f2.5	127.50		
Kodak 8-90 Magazine f1.9	149.50		

We have a continuous turnover of used cameras and equipment. Rush your order now to get what you want. If it is not listed here, we may have it in our vast stocks. So don't delay, do it today!

Call or Write for FREE Quotation!

GRAND CENTRAL
CAMERA EXCHANGE INC
One East 43rd Street • New York 17, N. Y. • MUrray Hill 2-0866

RITZ
CAMERA CENTERS

NO FAIR TRADE LAW IN WASHINGTON D. C.

"BUY-BY-MAIL"

From the Nation's Capital
AND SAVE ON EVERYTHING

BRAND NEW!

Original Factory Cartons and Guarantees

EXPOSURE METERS

Reg. 32.50 General Electric PR-1 Only 23.75
Reg. 24.50 General Electric DW-68 Only 18.75
Reg. 15.95 General Electric Mascot Only 12.75
Reg. 29.95 Weston Master II Only 23.50
Reg. 16.50 Weston DR with case Only 13.50
Reg. 32.95 Norwood Director M-2 Only 23.95

Reg. 2.50 Case for any meter ONLY 2.00

RETINA III C
Reg. 185.00 ONLY $145.00

RETINA II C
Reg. 135.00 ONLY $106.00

Reg. 13.50 Retina Leather Case Only 10.00
Reg. 24.00 B.C. Fan Fold Pkt. Flash Only 12.95
Reg. 62.50 Cutler Lens 35mm f5.6 Only 49.00
Reg. 82.50 Longar Lens 80mm f4 Only 65.00
Reg. 17.50 Retina 35-80 Optical Finder Only 13.50

ARGUS C-3
Camera, case, and flash
Reg. 66.50 ONLY $52.95

ARGUS C-4
Camera, case, and flash
Reg. 99.50 ONLY $77.95

Reg. 49.50 Argus C-3 Telephoto Lens Only 38.95
Reg. 49.50 Argus C-3 Wide Angle Lens Only 38.95
Reg. 75.00 Kodak Signet f3.5 Camera Only 59.50
Reg. 59.75 Kodak Bantam R.F. Camera Only 47.50
Reg. 99.50 Vitessa MXV f3.5 Camera Only 77.50
Reg. 159.50 Vitessa "L", Ultron f2 Camera Only 125.00
Reg. 54.50 Vito II, Skopar f3.5 Camera Only 39.50
Reg. 270.00 Voightlander Prominent f1.5 Camera Only 210.00
Reg. 89.50 Ansco Super Regent LVS Camera Only 70.00
Reg. 39.50 Ansco Memar f3.5 Camera Only 32.00

ARGUS PROJECTOR
300 Watt with Blower, Case
Reg. 48.50 ONLY $38.50

ARGUS COMPLETE AUTOMATIC PROJECTOR
With Carrying Case, Automatic and Standard Slide Changer, and one Magazine 300 Watt—Blower Cooled
Reg. 66.50 ONLY $52.95

Reg. 59.50 Signet 300W Projector Only 48.50
Reg. 87.00 A.O. Performer 500W Proj. w/case Only 68.00
Reg. 49.95 A.O. Shot 300W Proj. w/case Only 38.95

BROWNIE 8mm MOVIE CAMERAS

f2.7 Reg. 37.50 Only 29.50
f1.9 Reg. 46.75 Only 36.95

BROWNIE MOVIE PROJECTOR

f1.6 Reg. 62.00 Only 50.00
Reg. 149.50 Cine Kodak Mag. 8, f1.9 Camera Only 118.00
Reg. 169.50 Cine Kodak Mag. 16, f1.9 Camera Only 135.00
Reg. 130.30 Kodascope 8-71, 750W Proj. w/case Only 102.50
Reg. 425.00 Kodascope FR2, 16mm Sound Proj. w/case Only 325.00

KODAK STEREO CAMERA
Reg. 84.50 ONLY $67.00

Reg. 9.50 Stereo Leather Case Only 7.95
Reg. 9.95 B.C. Flashgun Only 7.95
Reg. 12.75 Kodaslide Stereo Viewer I Only 9.95
Reg. 23.75 Kodaslide Stereo Viewer II Only 18.95
Reg. 69.95 Stereo Royal Table Viewer Only 54.95

JUST OUT! ANSCOCHROME

Original Ansco Package Guaranteed Fresh Dating	Reg.	Sale
3 rolls 35mm Anscochrome, 20 exp.	5.55	4.70
3 rolls 120 or 620 Anscochrome	3.75	3.15
1 pkg. 35mm Anscochrome Easy Loader (8, 20 exposure bulk loads)	9.95	8.45

WRITE FOR MAIL ORDER PRICES ON ITEMS NOT LISTED. You save by buying from our Washington, D. C., Mail Order Department where minimum Fair Trade resale prices do not apply. Please include check or money order for full amount plus estimated postage. Fair Trade items at reduced prices are available only on a remittance-with-order-basis, from Washington, D. C. These offers are valid only in states where such offers are not expressly prohibited.

"For Personalized Service"
Send your order or inquiry to:

BOB RITZ
618 12th St. N.W., Washington 5, D. C.
30 DAY MONEY BACK GUARANTEE

new books

THE COMPLETE AMATEUR PHOTOGRAPHER, by Dick Boer, published by Iliffe & Sons, Ltd. Cloth bound, 6 x 9, illustrated, 264 pages.

A book which guides the beginner through the entire photographic process. Each phase, from the mechanics of the camera through the darkroom to the final print, is discussed in detail.

HOW TO PHOTOGRAPH WOMEN, by Peter Gowland, published by Crown Publishers, Inc. Cloth bound, 7 x 9¼, illustrated, 128 pages, $2.95.

This is a second edition of Peter Gowland's successful book which deals with the technical, esthetic, and human aspects of photographing women. It includes additional charts, pictures, and text.

ROLLEI HANDBOOK by Alec Pearlman. Published by Rayelle Pub., 5700 Oxford St., Philadelphia 31, Pa. Paper bound, 6 x 4½, illustrated, 169 pages, $2.95.

A concise pocket guide to Rollei photography in black-and-white and color.

TYDINGS GUIDE TO THE LEICA by Kenneth S. Tydings. Published by Greenberg: Publisher, 201 E. 57th St., New York 22, N. Y. Paper bound, 5 x 7¾, illustrated, 128 pages, $1.95.

Based mainly on mechanical and pictorial aspects of Leica cameras, this guide book can also be used for the Kardon, Leotax, Nicca, and Tower cameras. A special color section is included.

THE SECRET OF BETTER ENLARGING by Richard Gee. Published by The Fountain Press, England; dist. by Rayelle Pub., 5700 Oxford St., Philadelphia 31, Pa. Paper bound, 7¼ x 4¾, illustrated, 52 pages, 50 cents.

Avoiding the deep theoretical principles and optical science of the enlarging process, this book is aimed at helping the reader through the often difficult road to print perfection.

STEREO REALIST MANUAL by Willard D. Morgan and Henry M. Lester. Published by Morgan & Lester, 101 Park Ave., New York 17, N. Y. Cloth bound, 6½ x 9, illustrated, 400 pages, $6.

Covering all phases of stereo photography, this book contains black-and-white and color stereo print pairs (viewing glasses included) and editorial contributions by 14 stereo experts. See *Stereo Today* in the February, 1955 issue of POPULAR PHOTOGRAPHY for a detailed review.

OUR BEAUTIFUL WESTERN BIRDS, by Russell T. Congdon. Published by Exposition Press, 386 Fourth Ave., New York. Cloth bound, 6½ x 9¾, illustrated, 408 pages, $9.00.

An informal study with more than 185 action photographs of the birds of the Western states and Canada. Added to Dr. Congdon's complete account of their life and habits are several chapters on all phases of bird photography.

MARTIN AND HIS FRIEND FROM OUTER SPACE, by Ivo Duka and Helena Kolda. Published by Harper & Brothers. Cloth bound, 6½ x 8⅞, illustrated, 96 pages, $2.50.

In this sequel to *The Secret of the Two Feathers* we follow Martin and his new friend through their adventures on Earth and their inter-planetary communications on a home-built "Tele-Spacer." As in the earlier book the authors make frequent use of double exposures and other trick photographic techniques.

1955 UNIVERSAL PHOTO ALMANAC, edited by Edna Bennett. Published by Falk Publishing Company, Inc., 10 West 33 St., New York. Paper bound, 8½ x 11, illustrated, 254 pages, $2.50.

Features on photography and photographers, market and technical information, sections on dealers and distributors, all are combined in this volume. The lead article is John Steinbeck's tribute to the late Robert Capa.

EDUCATORS GUIDE TO FREE TAPES, SCRIPTS AND TRANSCRIPTIONS, by Walter A. Wittich and Gertie L. Hanson. Published by Educators Progress Service, Randolph, Wis. Paper bound, 8½ x 10½, 144 pages, $4.75.

This is the first edition of a valuable educational service which organizes and describes free informational tapes and transcriptions. It is designed as a companion to the other services, *Educators Guide to Free Films* and *Educators Guide to Free Slidefilms*. Complete title and subject indexes are provided.

PHOTO-DIGEST NO. 1, compiled by Philip Johnson. Published by The Fountain Press, distributed in the United States by Rayelle Publications, Inc., Philadelphia. Paper bound, 5½ x 7½, illustrated, 132 pages, $1.95.

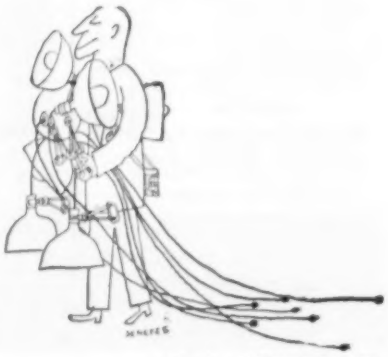
Eight complete features by leading photographers on flashbulbs, portrait lighting, photographing children and animals, pictorial and color photography, using the Leica for nature shots, and making prints. The book includes photographs and charts.

THE WORLD OF ALBERT SCHWEITZER, photographs by Erica Anderson, text and captions by Eugene Exman. Published by Harper & Brothers, 49 East 33 St., New York. Cloth bound, 9 x 11¼, illustrated, 144 pages, $5.00.

This is an impressive photographic record of Albert Schweitzer's two worlds—the artist and scholar in Europe and the physician and surgeon at Lambaréné in the African jungle. The story describes his life through pictures of everyday occurrences and is amply supplemented by biographical and factual text.

BETTER KODACHROME PICTURES. Published by the Eastman Kodak Co., Rochester 4, N. Y. Paper bound, 6 x 8½, illustrated, 33 pages, 35 cents.

A how-to Kodak publication on the use of Kodachrome film under all lighting conditions.—



RITZ CAMERA CENTERS

WASHINGTON, D. C.
618 12 St. N.W.
607 14 St. N.W.

NEW YORK, N. Y.
133 W. 44 St.
(Between 6th Ave. & Times Square)

BALTIMORE, MD.
26 W. Lexington St.
214 E. Baltimore St.

PHILADELPHIA, PA.
1414 Chestnut St.
(Chestnut & Broad)

RITZ "NO-RISK" PURCHASE PLAN

Every Purchase you make from Ritz is a "NO-RISK PURCHASE"—for you must be completely satisfied or your money will be refunded for any reason whatsoever, after a 30-day trial. Fair enough?
Run to Ritz for the best buys. Quantity buying for our many stores brings you lower prices.

Walz Coated Screw-In Filters

INDIVIDUALLY MOUNTED FILTERS THAT SCREW DIRECTLY INTO YOUR CAMERA

So Compact That Camera or Case Can Be Closed Without Removing Filter.

PRICES

For the following cameras or lenses:	Individual Filters or Lens Hood	KITS Color or Black & White
Argus C3	1.95	6.75
Biotar f2	3.95	11.75
Biotar f2 P.S.	6.95	20.75
Canon f1.8	3.95	11.75
Contaflex	2.95	8.75
Contessa	2.95	8.75
Contax Sonnars	3.95	11.75
Graphic 35	2.95	8.75
Kodak Signet	2.95	8.75
Kodak Bantam R.F.	2.95	8.75
Kodak Retinas	2.95	8.75
Leica Elmar f3.5	1.95	6.75
Leica Summicron	3.95	11.75
Leica Summitar	3.95	11.75
Leica Summar	3.95	11.75
Nikon f2	3.95	11.75
Nikon f1.5	3.95	11.75
Rollei f3.5	3.95	11.75
Rollei f2.8	6.95	20.75
Tessar f2.8, 3.5 P.S.	3.95	11.75
Vitessa	3.95	11.75

ALL WALZ FILTERS ARE GUARANTEED FOR LIFE

Colors available for individual filters: Type A (#85); Type F (#85C); Skylight Flash (#81C), Yellow (K2), Red (25A), Green (X1) Color Kit contains: Type A, Skylight, Flash. Black & White Kit contains: Yellow, Red, Green.

Walz Lens Hoods screw-into camera or Walz Filter. All Walz Filters and Lens Hoods are screw-in type except Rolleis and Vitessa, which are bayonet type.

Please specify your camera and lens when ordering.

EXPOSURE METERS
All Brand New

HORVEX METER
With incident light converter and chrome neck chain. Reg. $23.95 with case.
SALE $14.95
Super Sensitive Element.....$4.95

BEWI AUTOMAT
Push button meter with chain and incident light attachment.
SALE $19.75
Reg. $29.50 Case $2.00

KODALUX L ELECTRIC EXPOSURE METER
Tiny and compact. Clips on to accessory shoe of any camera. Calibrated in new Synchro Light Value System. Complete with leather case. Reg. $24.95. **SALE $19.50**

TERRIFIC TRIPODS
ALL BRAND NEW
STAR D MODEL D-18
Compact sturdy 3 section with multicam platform and double action pan head.
Reg. $15.40. **SALE $9.75**
STAR D CONQUEST
Elevator model, 3 section with multicam platform and double action panhead.
Reg. $19.95. **SALE $14.75**
BRAND NEW—QUICK-SET ELEVATOR CHAMP TRIPOD
Reg. $34.00 **SALE $21.75**

MOVIE EDITORS
All Brand New
MANSFIELD 1955 ACTION EDITOR
Complete with action motion picture viewer, splicer, rewinds, baseboard.
8mm Reg. .....$39.95 16mm Reg. $44.50
SALE .....$23.50 SALE $24.95

BEST BUY ON THE MARKET
BRAND NEW CRYSTARFLEX
Twin Lens Reflex Camera
Coated F3.5 Lens. Flash Synch, five speed shutter 1/10, 1/25, 1/50, 1/100, 1/200. Lever focusing. Sportsfinder.
Case $4.95
Reg. $57.95 **SALE $24.95**

KODAK FILM SALE
ORIGINAL EASTMAN KODAK PACKAGE
ALL GUARANTEED FRESH DATING

BUY THREE ROLLS AND SAVE

3 ROLLS	Reg.	Sale
35mm Kodachrome 20 exp.	9.75	8.25
35mm Kodachrome 36 exp.	14.85	12.50
35mm Ektachrome 20 exp.	5.50	4.70
8mm Kodachrome 25 ft. roll	11.25	9.50
8mm Kodachrome 25 ft. magazine	13.95	11.85
16mm Kodachrome 50 ft. magazine	20.85	17.70
16mm Kodachrome 100 ft. roll	31.20	26.50
620 or 120 Kodacolor	5.94	4.75
620 or 120 Ektachrome	3.75	3.10
828 Kodachrome	5.55	4.75
335 Kodachrome Stereo	13.95	11.85

LENSES GALORE AT EACH RITZ STORE

Superb Lenses that amaze the experts. Compare with the most expensive lenses made.

ALL BRAND NEW—ALL COATED
FOR 8mm MOVIE CAMERAS

1½" F2.5 TELEPHOTO — Reg. $26.95 — **SALE $17.75**
Focusing mount, click stops, built-in filter holder.

1½" F1.9 TELEPHOTO — Reg. $38.95 — **SALE $24.75**
Focusing mount, click stops, built-in filter holder.

7mm F2.5 WIDE ANGLE — Reg. $29.95 — **SALE $17.75**
Fixed focus, click stops, built-in filter holder.

7mm F1.9 WIDE ANGLE — Reg. $44.95 — **SALE $27.75**
Focusing mount, click stops, built-in filter holder.

FOR 16mm MOVIE CAMERAS

3" F2.5 TELEPHOTO — Reg. $42.50 — **SALE $27.75**
Focusing mount, click stops, built-in filter holder and sunshade.

17mm F2.7 WIDE ANGLE — Reg. $34.95 — **SALE $23.75**
Focusing mount, click stops, built-in filter holder.

1" F:0.95 NORMAL — Reg. $175.00 — **SALE $145.00**
Ultra high speed. Standard 16mm "C" mount. Nine elements, Coated, Coated, Color Corrected. Amazing resolving power.

FOR LEICA CAMERAS

135mm F4.5 TELEPHOTO — Reg. $75.00 — **SALE $59.50**
Steinheil Culminar, Coupled to Rangefinder. Coated, Color Corrected.

135mm F3.8 TELEPHOTO — Reg. $66.95 — **SALE $49.95**
Arco Tele Colinar. Outstanding optical system. Coated, Color Corrected. High resolving power.

85mm F2.8 TELEPHOTO — Reg. $84.50 — **SALE $59.50**
Steinheil Culminar, Coupled to Rangefinder. Coated, Color Corrected.

85mm F1.5 TELEPHOTO — Reg. $199.50 — **SALE $157.95**
Lithagon, 6 element. Coupled to rangefinder. Click Stops. Coated, Color Corrected.

35mm F4.5 WIDE ANGLE — Reg. $82.50 — **SALE $59.50**
Steinheil Orthostigmat. Coupled to Rangefinder. Coated, Color Corrected.

FOR EXAKTA CAMERAS

Also available for Exa, Praktica, Praktiflex, Pentacon

135mm F4.5 TELEPHOTO — Reg. $60.00 — **SALE $44.75**
Steinheil Culminar, Coated, Color Corrected.

135mm F2.8 TELEPHOTO — Reg. $149.50 — **SALE $119.50**
Steinheil Quinar, Pre-set diaphragm. Coated, Color Corrected.

85mm F2.8 TELEPHOTO — Reg. $65.00 — **SALE $51.95**
Steinheil Culminar, Coated, Color Corrected.

85mm F1.5 TELEPHOTO — Reg. $179.50 — **SALE $145.00**
Lithagon, 6 element. Click Stops. Coated. Color Corrected.

40mm F3.5 WIDE ANGLE — Reg. $49.50 — **SALE $39.95**
Steinheil Cassaron, Coated, Color Corrected.

35mm F4.5 WIDE ANGLE — Reg. $64.45 — **SALE $49.75**
Lithagon. Pre-set diaphragm. Covering power of 64°. Great depth of field. Coated, Color Corrected. Extremely sharp. With case.

RITZ PRECISION N. K. K. BINOCULARS

Please do not confuse Ritz Binoculars with low-priced binoculars currently being advertised everywhere. Ritz Binoculars are precision instruments on a par with a famous make selling for $150 to $200.

ALL BRAND NEW
LIGHT ALLOY CASTING
HARD-COATED OPTICAL PRISMS
WITH LEATHER CASE AND STRAPS
FULLY GUARANTEED

Size	Angular Field	Weight	SALE PRICE
6x30 C.F.*	7.5°	17.7 oz.	$29.50
8x30 C.F.*	7.5°	17.7 oz.	39.75
7x35 C.F.*	7.0°	17.7 oz.	34.75
7x50 C.F.*	7.1°	35.5 oz.	39.75
15x60 C.F.*	4.0°	47.6 oz.	64.75
7x35 I.F.* Wide Angle	11.0°	30.0 oz.	84.75

* Note: CF—Central Focus, I.F.—Individual Focus.

FOR ARGUS C-3 AND OTHER 35mm CAMERAS
Contessa, Contaflex, Bolsey, Argus C-4, Signet, Retina, Voigtlander.
Reg. $29.50 SALE **$16.95** each
Auxiliary Lens TELEPHOTO or WIDE ANGLE
Complete with Viewfinder. Coated, Color Corrected.

FREE PHOTO BARGAIN BULLETIN

May We Quote On Items Not Listed

VISIT any Ritz store or WRITE for anything you need and—SAVE. WHEN ORDERING BY MAIL—Please include check or money order plus estimated postage. Excess refunded. All items subject to prior sale or change without notice.

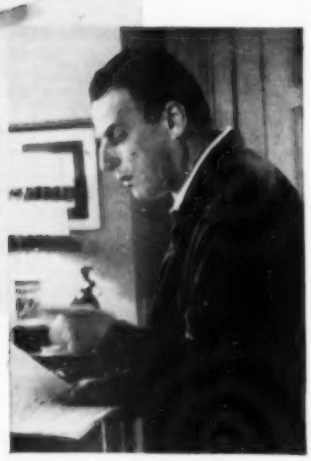
MAIL

Your Order or Inquiry "For Personalized Service" to
BOB RITZ
618 12th St. N. W.
Washington 5, D.C.

FULL MONEY BACK REFUND AFTER 30-DAY TRIAL!

movie section

A talk with Stanley



Stanley Kramer carefully explains what he wants from his actors during the shooting of *Not As A Stranger*, one of the outstanding films of the year. He spent months thinking out the script.

Amateur motion picture makers and Hollywood directors have one basic problem in common: both are faced with making a blank screen come to life. Since the creative problems are the same for both groups, we feel that the experienced professionals have much information to offer which will be of value to amateurs. For this article we have chosen to interview Stanley Kramer, a producer-director who has a list of distinguished films behind his name (High Noon, The Caine Mutiny, Champion, The Men) *and whose latest film for United Artists,* Not As A Stranger, *can soon be seen on local theatre screens.—The Editors*

"Probably the most important phase of motion picture work," said Stanley Kramer, "is the one where a director visualizes what will be in the final film. Long shots, medium shots, close-ups, flow through his mind. From this imaginative thinking his film will be born."

We had been talking to Mr. Kramer for about five minutes. His latest statement prompted us to scribble quickly another idea—often amateurs shoot first and ask themselves questions later.

"Could you tell us something of how you 'visualized' one of the scenes in *Not As A Stranger?*" we asked.

"Yes," he said. "The operating-room scene which comes near the end of the film might serve as a good example.

"I was confronted with the knowledge that operating-room scenes in motion pictures have been done so often and so poorly that they were loaded with cliches. I worked on this scene alone for months away from the set. Planning, replanning, I finally decided to utilize the technique of quick cuts from one shot to another, letting close-ups carry the drama. When I concluded my thinking, I got together with the production, design, and camera crews and began planning with them. Reluctantly, we came to the conclusion that the proposed

Kramer

Noted Hollywood producer-director discusses the creative side of motion picture making

By JOHN DURNIAK

scene had to have fifteen different lighting cues.

"We started the operating-room shot from the ceiling, then moved down close to the operation, and pulled back to a medium shot . . . one of doctor moving around table," (Mr. Kramer began speeding up his delivery) ". . . anesthetist checks gas gauge . . . foot of the table showing blood transfusion to the legs . . . pan to the door and nurse carrying in more blood plasma . . . showing heart beating." We began missing phrases, but Mr. Kramer had gotten across his point. The whole scene lasts approximately three minutes on the screen but packs a full hour's wallop.

"Can I get you a cup of tea? Coffee?" asked Mr. Kramer. We declined his offer, mostly because there were so many more questions to be asked.

"What advice would you give an amateur?"

"Not to be afraid to experiment, and get as much experience as possible in all phases of motion picture work—writing, editing—all phases," he replied.

"Is there such a thing as a hackneyed subject?"

"There sure is," he said, smiling.

"The answer we were hoping for was something like, 'No, there are only hackneyed treatments by photographers.'"

"Ah, the question of treatments. That's different," he replied.

"Take the detective-thriller motion picture," he continued. "It has been done to death time and again, yet put it in the hands of a man like Hitchcock and you have something new before you. Yes, a creative director working with an imaginative cameraman can turn an ordinary subject into outstanding film work."

"How many films do you see a month?

"Well, let's say, I go out of my way to see any- (*Continued on page* 111)

Photograph made from the new 16-mm Tri-X Reversal film was shot at 400 ASA rating (developed normally), with 60-watt bulb as only illumination.

Cine-Kodak 16-mm Tri-X Reversal—

Revolutionary amateur movie film

By ALLAN GREEN

A new film—Cine-Kodak 16-mm Tri-X Reversal—for amateur black-and-white motion-picture photography is now on the market, and promises to open up a new world in available-light movies without extraordinary expense. Although the amateur will be required to send his films to private labs (not Kodak), the cost for processing will add only about $2 to the list price of $4.85 for a 100-ft roll. Formerly, Tri-X negative film was available but required that a print be made before it could be shown. This extra cost for most amateurs was prohibitive.

Eastman Kodak has rated this reversal film the same as all other Tri-X films they produce—160 ASA tungsten and 200 ASA daylight. But like the other Tri-X stock, we have found from our tests that the film gives excellent results when rated at 400 ASA tungsten. With high-speed processing, which some commercial labs offer, we have obtained good results after shooting the film at a 1000 ASA rating. Good footage was made under lighting conditions that seemed preposterous. The area of picture-making that was once opened to the miniature-camera still photographer and his high-speed chemicals, is now wide open for movie amateurs with ordinary lenses on their cameras.

The first two hundred feet of the new film that could be obtained were immediately put through tests for both normal and forced development. Here is a report on the testing procedures and our findings.

Equipment. Through the co-operation of the Camera Equipment Company, New York, N. Y., the following advanced equipment was supplied so that a maximum of controls could be kept on the film: 16-mm Arriflex camera with motor speed stabilized by a voltage regulator. (This arrangement assured us of getting a true 24 frames per second at a shutter opening of 170 degrees—or 1/50-second shutter speed.) Three Schneider Xenar lenses of different focal lengths. All three lenses were tested to insure their having the same contrast characteristics and resolving power, and to make certain that corresponding lens stops transmitted the same amount of light.

Lighting. A 60-watt tungsten lamp in an ordinary household reflector illu-

1000 ASA
Normal Development

1000 ASA
Special Development

Comparison shows limits of film under normal processing for high ASA rating (top), and possibility of good photography (above) when processed specially for 1000 ASA rating.

minated a living room in which the tests were made. Before each scene was shot, light falling on an Eastman Kodak Neutral Gray Card giving 18 percent reflectance was measured, and each reading was double checked.

Film Ratings. One roll — for normal processing—was rated at the following ASA numbers: 160, 400, and 1000. The second roll—for forced developing using the new Bernard Hoffman PRA developer —was rated at 1000 ASA and 400 ASA.

Processing. Controlled processing on all film was done by Video Film Labs, 131 West 23rd St., New York, N. Y.

Findings, normally processed roll: (1) At 160 ASA, there was good detail in both shadow and highlight areas, without perceptible blocking-up in the latter (2) At 400 ASA, the shadow areas began to lose some detail, which, however, was not objectionable. (3) At 1000 ASA, the shadow areas went black, the highlights were veiled, and the general result could not be considered as acceptable. Grain was at a minimum throughout the roll and could hardly be noticed when screened.

Roll processed for high speed: (1) First scene rated at 1000 ASA was made with model Lucienne Van Kan seated in front of a large mirror with 60-watt lamp three feet from her face. Reading from card called for f/2 at 24 frames-per-second. (Amateurs using 16 frames-per-second speed would get about ⅓ of a stop more exposure.) There was approximately three foot lamberts (reflected foot candles) reflected from the model's face. At the time of the shooting, we felt if an image resulted, it certainly would be worth shouting about. There was a deep-rooted feeling that film would be wasted shooting at this rating, but we were wrong. The projected image had clear, crisp highlights, and shadow areas held all the detail anyone could want. The results were highly satisfactory.

Another frame taken from a scene exposed at 1000 ASA, specially developed, shows the versatility of the new Kodak Tri-X Reversal.

(2) For the second scene, again rated at 1000 ASA, we chose flat lighting. Once again, the results proved the versatility of Tri-X. The highlights came through excellently while the shadows contained acceptable detail.

(3) For the final scene, we rated the film at 400 and shot the model with the same lighting setup as was used for the

WESTON MASTER

the meter most photographers use!

Simplified WESTON DR Exposure Meter...

direct-reading and extremely compact — ideal for the casual shooter. Used with all cameras, all film, including color.

True rendition of all colors requires true, *on-the-dot* exposure every time. That's why it will pay you to invest in a Weston Exposure Meter for color shooting . . . where such a *small* difference in your settings can make such a *big* difference in results. Made by the world's leading builder of precision instruments, the Master will give you accurate exposure settings every time; using either the widely preferred reflected brightness method or the incident light method with the Invercone. Far quicker and simpler, too; for the exposure dial is clearly marked to give the same precise control of color shots as it does for black and white. At all camera stores.

WESTON *Exposure meters*

"AN OUNCE OF PREVENTION . . ."

The old saying by Ben Franklin is never more true than when applied to irreplaceable stereo slides. Once damaged, they're gone forever. So when you get them back from the laboratory, be ready with "an ounce of prevention" . . . file them safely in a handsome Nega-File chest. Every Nega-File is made of beautifully finished hardwood with heavy, brass plated hardware and felted bottom.

No. 25-I—Beautiful Quartered Sycamore. Accommodates all viewers and individual filing of 50 cardboards or 25 glass slides.
No. 25-G same as 25-I but is for group filing of 150 cardboards or 75 glass slides $4.45

No. 50-I accommodates all viewers, extra batteries and individual filing of 100 cardboard slides or 50 glass mounts.
50-G same as 50-I but for group filing of 300 cardboards or 150 glass slides. Available in Quartered Sycamore or two-tone Walnut finish $6.45

No. 75-I (for slides only) individual filing of 150 cardboard mounts and No. 75-G for group filing of approximately 225 glass slides or 450 cardboards. Available in Quartered Sycamore or two-tone Walnut finish $6.45

If your dealer cannot supply you, order direct.

Ask for free catalog and filing handbook.

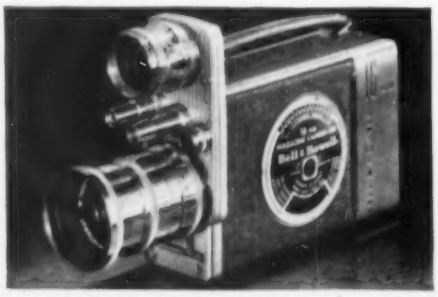
THE NEGA-FILE CO., EASTON 10, PA.

EXPERIENCE LEADS TO BELL & HOWELL

For thrills unknown to "stills"... take action with the 172-A!

LIFELONG FRIENDSHIP begins the moment you meet the Auto-8 Explorer ...*only* two-lens 8 mm magazine camera in which viewfinder is *always* in position with lens. Fast action or slow motion, your movies are masterpieces every time. With f/2.5 Comat lens, $169.95. Send for booklet with details.

HONORARY ACADEMY AWARD 1954
To Bell & Howell for 47 Years of Pioneering Contributions to the Motion Picture Industry



200-T TWIN AUTO LOAD matches smart design with sharp 16mm performance. Swifturn turret, 5 speeds. With f/2.5 Comat lens, $219.95.

273 STATESMAN, "pride of the 16mm movie maker!" Projects with 750-watt brilliance, operates easily. Reverse, "stills." $199.95, with case.

Bell & Howell

7106 McCORMICK ROAD • CHICAGO 45, ILLINOIS

scene normally processed at the 160 ASA rating. The results had the same characteristics as the normally rated and processed roll.

A slight increase in grain was noted as a result of the stronger developer, but it was entirely acceptable.

Now for other questions.

Can an amateur have his film processed for high ASA ratings? The only lab we know of at the moment that will process amateur film at 1000 ASA ratings is the Video Film Labs of New York. The charge is $2.50 for special processing of a 100-ft roll. Processing at normal ratings—160 or 400 ASA—is set at $2. (Most commercial labs will process this film normally. For a list of recommended labs write to Eastman Kodak Company, Motion Picture Sales, Rochester, N. Y.)

Is the film available in 8-mm size? Eastman Kodak says no.

At what available-light events can this film be used? Scenes and events that could never before be recorded with reversal film can now be photographed satisfactorily. Night football and baseball games can be considered "standard" subject matter. Night clubs, theatres, carnivals, outdoor night picnics and beach parties, candids of children and babies under normal room light conditions, and indoor parties can now be filmed. Documentaries can be shot without using additional light.

Where can it be bought and in what lengths? All Eastman Kodak dealers will carry it. It comes in 100, 200, and 400 ft. rolls. (The film is also made for use in high-speed cameras.) It comes with single or double sprockets.

Can it be used outdoors? Yes. On simple cameras, or those with a minimum of shutter and aperture controls a neutral-density filter should be used over the lens. This filter cuts down the amount of light entering the lens without changing contrast characteristics thus allowing for normal exposure.

Tri-X Reversal Film has shown its great possibilities in our tests. But as with any new film, a certain amount of experimentation must take place at the hands of the individual photographer. Only he can find the point at which he is most satisfied with his results. At the moment of this writing, many professional motion-picture companies and laboratories are testing this new film to see what it can do for them. The amateur photographer might take a hint from the professionals and try a roll on some of the scenes that he might have been considering for a future project.

If you want to surprise yourself, and see what can be done with Tri-X Reversal, turn on your normal living room lights and shoot your family.—

Allan Green, the writer of this article, is a Technical Consultant with the Camera Equipment Co., N. Y. He has worked at solving technical problems with almost all the major motion picture companies. Green was a still photographer and a cinematographer with the U.S. Army Signal Corps on reconstruction films in Europe.—The Editors.

A Talk with Stanley Kramer

(*Continued from page* 107)

thing that promotes my interest. I see mostly all the foreign film, and all films by the front-line directors—Kazan, Wilder, Stevens, and the others."

"What is the greatest fault of amateur motion pictures?"

"That's an easy one," he said, "—panning too much, and too fast."

"Through careful scripting, camera work, and editing, do you believe the amateur can get drama, suspense, and interest into the everyday subject matter he works with?"

"Yes," said Mr. Kramer, crisply, and wanted for the next question.

"And what about your next picture?"

"I'll be leaving for Spain shortly to do a film in VistaVision," he replied. "Our story is C. S. Forester's *The Gun*. The theme of the book is, no matter what the degree of human suffering, man can triumph over superhuman odds. It is the story about a great cannon that is pulled across Spain. I chose VistaVision because I think the locations and the story will be enhanced by it.

"As far as color goes, we shall be out to duplicate the type of colors the Spanish painter Goya used—rich and full. We have studied picture books and the possibilities look wonderful."

Shaking hands, just before we left, we had the strong opinion that here was a man who would not take "no" or "impossible" for an answer. We felt that here was a man who was willing—like the characters of his next film—to go any distance against all odds to achieve his goal. Could amateurs generate such energy?—

Movie Background Music Available for all Moods

Mood music for both the movie hobbyist and motion-picture company now is available on high-fidelity disks comprising an assortment of more than fifty moods. The music was composed in France by Roger Rogers, and scored for symphony orchestra.

The specially composed music is said to be suitable for all types of film scoring and includes opening titles, bridge music, background music, and closing titles. Specimen "mood" titles are: *Love's Meditation, Desolation, Whimsical Tale, Desperation,* and *Frigates Away.*

The complete set consists of 24 two-sided 78-rpm vinylite records with grooves of standard size for easy cuing with 8- and 16-mm sound films, slides, magnetic sound films, and tape recordings. Lengths run from 40 seconds to three minutes.

Records can be purchased singly at $2 each or as a complete set. Buyer also gets a blanket license for non-commercial use of music.

For a complete list of titles, times, etc., write Thomas J. Valentino Co., Inc., 150 W. 46th St., New York 36, distributor for the records, released under the label, *Major Records.*

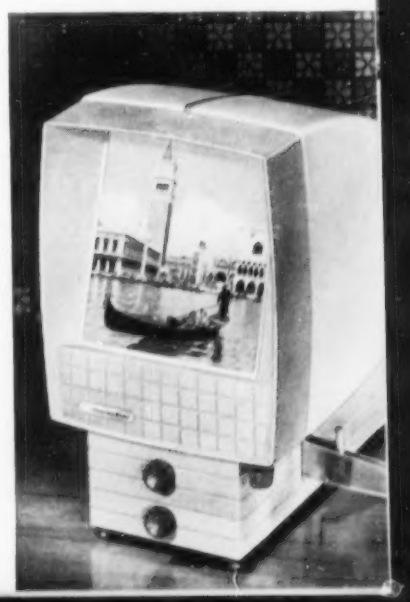
Now...more than ever...the two best buys in stereo cameras!

TOP TWO FOR 3-D COLOR are TDC's brilliant stereo cameras—the Colorist and the Vivid. At only $84.50, the all-metal Colorist (top) offers high precision so important in stereo. Makes sharp pictures easy.

TDC VIVID is today's most automatic stereo camera. Its Exposure settings take arithmetic out of photography. Single window coupled rangefinder and viewfinder. With exclusive depth indicator, $149.50.

SPECIAL OFFER! *Buy your TDC camera now and get a Savings Certificate worth $20 on any TDC stereo projector or table viewer.*

NEW TDC STEREO TABLE VIEWER magnifies size, glorifies colors for group enjoyment. Twin 200-watt lamps show your slides on big 6" x 9" black glass. Now family and friends share the breath-taking reality of three dimension color. Blower-cooled TDC Stereo Table Viewer, only $119.50. Write for free descriptive folder.



TDC division of

Bell & Howell

7106 McCORMICK ROAD • CHICAGO 45, ILLINOIS

Thousands are learning . . .
YOUR CAMERA IS ALWAYS WITH YOU
when you own a Mamiya SUPER-16

Smaller than a pack of cigarettes . . . yet offers precision features of the finest cameras.
A fast, f:3.5 anastigmat lens — color corrected and coated — focuses from 1 ft. to infinity. Built-in flash. Shutter offers speeds from 1/2 to 1/200 second and "Bulb." A single movement advances film, cocks shutter, and prevents double exposures. When viewfinder is closed, lens is covered and shutter release is locked — preventing accidental exposures.
Takes 20 double 16 size pictures.

Mamiya Camera Company of America, Inc., 82 Wall St., New York 5, N. Y.

actual size

$47.50 COMPLETE
with leather case, flash and built-in interchangeable filter

Neoprene—a helpful darkroom aid

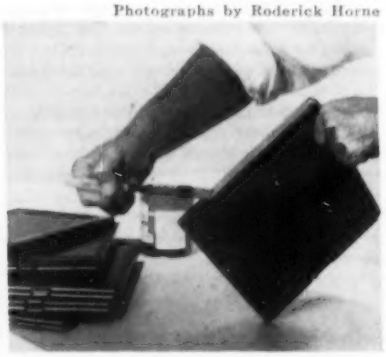
Liquid synthetic rubber patches, protects sensitive surfaces

AN AMAZINGLY versatile new product is now on the market which will take a lot of the headache out of photographic trouble spots. This is a synthetic rubber formula called Neoprene—developed specifically for use around the home, and of particularly effective application in the darkroom and with camera equipment of all kinds. Resistant to chemicals, oil, grease, and abrasion, and impervious to temperature changes, Neoprene is applied with an ordinary paint brush, roller, or sprayer—air-drying in about an hour to form a tough, flexible, air- and watertight rubber coating which adheres to almost any surface you can think of. Left-over Neoprene will keep in a closed can for nine months.

As a look at the accompanying illustrations demonstrates, Neoprene is invaluable in protecting wood surfaces from rot, metal from corrosion; and in restoring damaged or worn equipment to usable condition. Other attributes include use as a strong, waterproof bonding cement, and as a waterproofing material for cloth. The rubber shown in the illustrations is Gaco N-700, available in some hardware stores or directly from the Pro-Chem Co., Box 1928 Grand Central Station, N. Y. 17, N. Y., who will send price lists. (*Continued on page* 114)

Photographs by Roderick Horne

Cracks or rusted spots in trays can be covered with waterproof coating of Neoprene—which is impervious to any of the chemicals used in photographic processes.

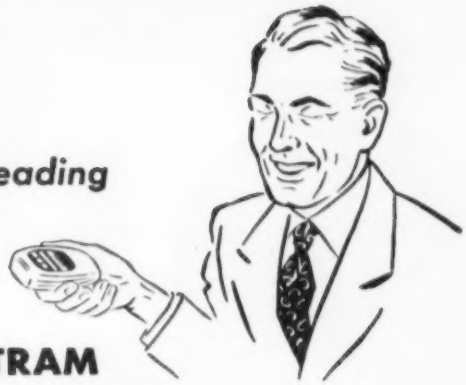


Light leaks in worn film holders can be stopped with application of the new "paint," which will remain flexible but firm and resist abrasion, hard knocks.

Perpetual elasticity is one of its most useful qualities. Here it is used to patch a camera bellows which was worn by frequent folding. A lightproof seal is effected.

Work benches subject to spillage during processing can be protected with liquid rubber. With large flat surfaces like these, material can be rolled on with a paint roller.

With your eyes shut tight
you can get the Correct Reading
for Perfect Exposure!



THE NEW MODEL BERTRAM

BEWI AUTOMAT "A"

AUTOMATIC EXPOSURE METER

Featuring the Amazing and Exclusive

"AUTOMATIC CALCULATOR"

for Quick, Easy,
Automatically Correct Readings!

JUST 2 SIMPLE STEPS:

1. **Press Button — hold a second.**
2. **Release — and get Correct Reading.**

Just about the most beautiful meter on the market — and extremely fascinating in operation. You have to see it to appreciate it. Priced at only 29.50, complete with Incident Light Attachment, Neck cord and Plastic Dustproof Box. Special Leather Case, $2.95.

This is the automatic age — and the new BEWI AUTOMAT "A" is the only meter with an automatic edge over all other meters. The "automatic calculator" automatically sets the shutter scale speed to the corresponding diaphragm scale so that exposure time and stop can be read off directly and immediately. No scales, no needles, no tables, no calculations. The BEWI AUTOMAT "A" gives correct lens openings and speeds for all shutters, including the new Compur Light Value shutters. For use with all cameras, all films, all ratings. Direct readings for both reflected and incident light; lens openings, f/1.5 to f/22; speeds 1/1000th to 4 minutes.

WILLOUGHBYS

110 West 32nd Street • 113 West 31st Street • New York 1, N. Y. • LOngacre 4-1600

Try amazing new BFi No. 80 One-Minute Film Developer Concentrate. See for yourself why it will soon be a favorite in darkrooms everywhere.

- Unheard-of developing speed — one-minute at 68°F.
- Greater detail in shadow areas — actually improves flash photos.
- No blocking up in shadows, either — you get clean details with truly natural shading.
- Economical — one quart of concentrate makes a FULL GALLON of working solution.
- High capacity — one quart will develop 200 4" x 5" negatives without replenishing.
- Easy to store — much longer tray life.
- Easy to use — as simple to work with as any developer you've ever tried.

WATCH FOR IT!

Next month — even bigger news is coming from . . .

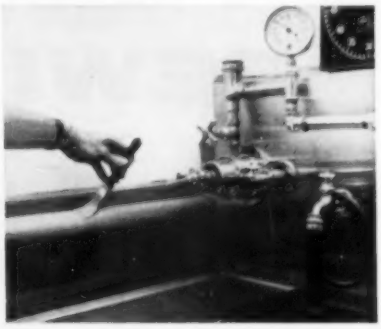
BFi BROWN-FORMAN INDUSTRIES
LOUISVILLE, KENTUCKY
A Division of Brown-Forman Distillers Corp.

NEOPRENE continued

Large-size, waterproof trays for emergency use in making big blow-ups are easily constructed from cardboard or plywood boxes—painted with two coats of Neoprene.

Sensitive equipment such as darkroom timers, so frequently ruined by corrosion from high humidity common in darkrooms, can be effectively protected with Neoprene.

Bottle caps can be protected from rust with liquid rubber—which also makes better sealer than customary paper-cap lining. Rubber seals when cap is tightened, resists wear.



Rubber coating on metal-work surfaces is good protection against corrosion, will last much longer than ordinary paint. Neoprene itself has no adverse chemical effect.

35-mm Today

(*Continued from page 50*)

f/2 for black-and-white, although *f*/1.4 or *f*/1.5 was often used for quality color.

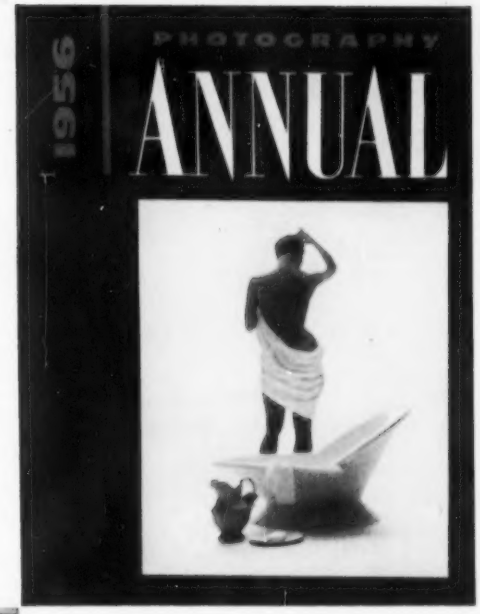
It therefore seems most likely that if and when these superspeed lenses ever become plentiful and popular their major application, especially at full aperture, will be for available-light color work. In black-and-white, films like Tri-X and developers like Microphen are giving so much speed that the trend is running toward the use of smaller lens openings in order to obtain increased depth of field. But color films, even the new Ektachrome and Anscochrome emulsions, are still not fast enough to look a 30 percent gift-horse in the eye.

One of the things pointed up by our discussion of the discrepancy between actual and theoretical light-transmission advantages at wide lens apertures is the need for the so-called "T-stop" system of calibrating lens diaphragms. In the T-system the stops are rated in terms of actual light transmission rather than relative aperture. The principal disadvantage of our present *f*-stop system is that differences in lens construction which affect light transmission are not accounted for. The *f*-stops do, however, provide accurate depth-of-field information which the T-stops do not. Both systems therefore offer decided advantages, and the ideal solution would be to mark lenses in both systems. Many of the speed lenses on the market today are equipped with two engraved *f*-stop scales. One of these scales could easily be replaced by a T-scale. At the very least, however, we should have the lens' T-rating for the maximum aperture. To our knowledge, the only lenses marked in both scales are those manufactured by Taylor, Taylor and Hobson in England for the now defunct Foton rapid-sequence camera once made by Bell and Howell.

The final verdict on these huge lenses—a 50-mm *f*/1.1 resembles nothing so much as a present-day 85-mm *f*/2 tele lens—is a long way off. When it is finally written it will depend on the uses to which photographers are able to put them in order to produce better photographs rather than in any cut-and-dried optical data. When camera lenses were largely limited to a maximum aperture of about *f*/8, the introduction of the then revolutionary *f*/4.5 anastigmats which were approximately three times faster exercised a profound liberating effect upon photography in general. It is certain that even if these ultraspeed lenses prove useful, they will have no such revolutionary effect upon 35-mm photography today.—

On Sale August 25

At Newsstands and Camera Stores



THIS IS IT!

the year's best photographs by the world's best photographers!

Ziff-Davis Publishing Company, *publishers of* POPULAR PHOTOGRAPHY, PHOTOGRAPHY Annual, PHOTOGRAPHY Directory, FLYING, MODERN BRIDE, RADIO & TELEVISION NEWS, POPULAR ELECTRONICS, AMAZING STORIES, FANTASTIC, G. I. JOE.

Swing-Over to Star-D

for the most exciting new idea in tripods!

NOW STAR-D HAS EVERYTHING FOR EVEN GREATER PICTURE PLEASURE

The new Star-D COMET elevating tripod shown in two positions—

HITCH YOUR CAMERA TO A STAR

Truly the World's Most Versatile Tripod

In no other tripod, regardless of price, can be found so many features combined in one instrument.

TRY IT AND YOU'LL BUY IT

LIFETIME GUARANTEED

DAVIDSON MANUFACTURING CO.
2223 Ramona Blvd., West Covina, California

Slide Showmanship *(Continued from page 77)*

elogs, unless you deliberately supply them. When one slide follows another on the screen, we get the unavoidable impression it was taken soon after the previous shot and at a location not too far distant. If you have ever seen a view from the Empire State Building follow a shot of the Golden Gate Bridge, you'll know just what I mean. Seeing them right together makes us feel they are only a stone's throw apart.

As long as we stay in one place, the audience is with us. It's when we start to move that we're likely to lose them. This can be avoided by inserting transition slides to bridge the gap. It's a long hop from New York to San Francisco, but you can take your audience with you. An airport view, a picture of a plane in flight, a close-up of a locomotive's driving wheels—these are a few examples.

These transition shots serve a dual purpose. First of all, they help get across the idea of travel and distance. They also serve to fill the screen for a moment while you prepare your audience for the change of scene. It's far better to leave them looking at a transition picture while you tell of the journey than to leave them behind with your last view in the previous location.

Chances are that you have some useful transition shots right now. Dig them out and put them to work. If you don't have enough, pictures like these can be taken later on and inserted in the right places. You don't have to revisit the original scenes to get them if you are careful to avoid showing anything that reveals where they were taken. Locomotive wheels, automobiles, and trains look pretty much the same everywhere. If you keep the background limited and simple, you can make them fit in almost anywhere.

You can do a better job, though, if you keep transitions in mind when you are out taking pictures. Railway stations, with town names showing, are convenient for indicating your arrival. Signposts serve to mark locations along a highway. Things like these provide ready-made titles for slide shows. When you want to show the end of a day, a sunset shot will serve. A picture of a clock may provide the time of day when it is important to your story. There are always many things that pictures can't tell, but the more you get into your pictures the less you have to worry about covering with narration.

Most slide shows call for quite a bit of narration. There are people and places to be identified and little side stories to be told. Some fans prefer to mix narration with background music, playing records during the showing and cutting down the volume of the music when they wish to talk above it.

There is an art to picking appropriate musical selections to fit in with different slide sequences. The hustle and bustle of city streets and the glare of neon signs calls for light and spirited passages. More peaceful accompaniment is suggested by quiet summer landscapes. Occasionally you can find a selection that hits the nail right on the head, like Ferde Grofé's *Grand Canyon Suite* for your Colorado scenes.

To make a neat, prepared package out of their musical background, some fans choose to record it on magnetic tape for playback when the show is presented. This system has many advantages. You can make far more record changes in making a tape ahead of time than you possibly can during the actual performance. The tape moves smoothly, giving an uninterrupted playing time of an hour at 3¾ inches per second on a 7-inch reel. Synchronization is easy. By remembering the particular passages you want to accompany different scenes, you can be ready to change slides to keep the pictures in step with the music.

If you want to go a step further, you can put both commentary and music on the tape and make the show almost run itself. Then all you have to do is make certain your slides are in the right order, so you can change them to keep up with the background and commentary.

Thus far we have discussed the slide show without considering photographic equipment. It can make the program smooth and pleasant or a nightmare. When slides are in order and the projector performs faultlessly, everything goes well. If slides are poorly bound or the carrier sticks, or if you have to skip around to find the pictures you want, the entertainment value of the show is likely to fall off sharply.

Modern projectors and slide filing systems are geared to work together. Most of the projectors sold today are built to take slides in magazines that serve as file drawers as well as holders for transporting them to the projector. Automatic and semi-automatic projectors are loaded merely by inserting one of these magazines. Then you move through the show without touching a single slide with your fingers. A completely automatic outfit has the further advantage of permitting you to take a position anywhere in the room, changing slides at will by pushing a button at the end of a remote-control cord or letting the projector change them itself in its own measured sequence.

If you have a few magazines of slides all in order to put on the show, there's nothing to it. Just put them in and run them off. If you only want to show a part of each magazine, you can do it with semi-automatic equipment. It permits you to select slides as you go along, but you must have them listed by number since you can't peek at the pictures themselves or read their titles while the magazine is in the projector.

In addition to having slides and projector in order before you start, you'll want to plan a seating arrangement for everyone's comfort. If furniture must be shifted, take care of it before you turn down the lights so everyone has an unobstructed view of the screen right from the start. Television seems to have encouraged furniture arrangements that are convenient for slide shows, too. If you set up the screen near the TV set, chances

are you can get by with the least possible furniture moving.

Television also has done something to make us more conscious of the values of good slide projection. People who view TV are always impressed to discover again how big, bright, and colorful 2x2 slides are. Their sharpness is a source of amazement. People don't compare home projection with the theater screen as much as they used to, so a huge screen is not essential. Nevertheless, if you use as large a screen as is convenient you will show your pictures to best advantage.

Projectors have been getting brighter the past few years, in part through greater efficiency and in part because of higher lamp wattage. You can get a 300-watt unit that will fill any average requirements or a 500-watt projector that will provide a brilliant image on the largest screen you can possibly use. Still bigger outfits are made for special uses in halls and classrooms.

A brighter image means that dense slides will show up better, and it also means you can afford to use some general room illumination while projecting. This makes the audience more comfortable. It's better than sitting in the dark, and your picture quality won't suffer as long as direct light doesn't strike the surface of the screen. One dim bulb in a lamp at the rear of the room will provide enough general lighting to relieve the blackness.

To avoid embarrassment it's a good idea to have a spare projector lamp handy where you can reach it if one burns out during a show. It is convenient, too, to be able to control some type of room light from the projector so you can get general lighting if you need it without having to call for aid.

Evaluating one's own pictures is never easy, but when you start putting your own slide show together you have to knuckle down and see just what you really have got. Maybe you'll want to include some shots that are pretty weak pictorially or technically, merely because you won't want to pass by the story they tell. That's all right for now, but there isn't a color photographer living who wouldn't do some things differently if he had his shows to shoot over again. That's one of the advantages of making slide shows. The applause makes your best efforts worth while, and your own knowledge of what is missing will help you plan a better picture series for your next slide program.—

Stage a Tabletop

(*Continued from page* 70)

we suggest that you construct the simple stage illustrated and diagrammed here so that you can work on your projects more efficiently and expertly and come up with fine results. The size of the stage is based on a depth of field of from seven to thirteen inches with a lens aperture of f/16 and focusing scale set at 13 inches. These settings provide good time-exposure control, with the length of exposure varying from one half to several seconds, depending on intensity of light and color.

Delta Specials!

35mm BULK FILM
35mm BULK ANSCOLOR DAY FILTER (specify size) Use Indoor or Outdoor — TUNGSTEN w/FREE — 50' Makes 15/20 or 9/36 Exp. 7.45

MOVIE FILM

16mm COLOR 100' ANSCO* Day. Factory Packed Inc. Proc. 5.95 Ea. 3 for 17.50 6 for 34.50

Color Magazines ANSCO DAY. Inc. Proc. 16mm x 50' 6 for 21.00 3.75 Ea. 3 for 10.95

8mm ANSCOLOR x 25' Incl. Proc. 3 for 6.49 2.25

8-16mm B & W 50—100 ASA Inc. Proc.
8mm x 25'.....4 for 4.45
Bolex H-8 .....4 for 12.60
16mm x 100'.....4 for 11.00
16mm x 50'.....4 for 6.30

8-16mm HIGH SPEED WORLD'S FASTEST 200 ASA FRESH, 1956 date, Inc. Proc.
8mm x 25', Roll ..2.49 (each) 7.20 (3 for)
8mm x 25', Mag. ..2.95 8.25
Bolex H8, 100' ...5.95 16.95
16mm x 100' 5.75 16.35
16mm x 50' Mag. ..3.95 11.25

8/100' for BOLEX H8* SUPER XX EK Pack, Factory Proc. Each 5.95

16mm PLUS-X MAGAZINES Kodak factory pack inc. proc. 3 for 6.85 6 for 13.49, 12 for 25.95

50x16mm mag load 50W, 12/5.50
MT 16 mag 5/3.25, 8mm 3/4.50
100-8mm Bk 24W/1.95 50W/2.95

MORSE G-3 DEV. TANK Dev 100' 8/16mm ½ gal dev kit 2.25 23.95
1 Qt Anscolor Devel. Kit...3.05
1 Gal Anscolor Devel. Kit 6.00

35mm COLOR NEW ANSCHROME 32ASA! FRESH 1956 DATED Just Released! 28' roll, notched to make 8/20 exp loads, numbered frames, in NEW EASY LOADER for DAYLIGHT LOADING. Complete, 28' in EASY LOADER 8.75
FREE! 8 MT cart w/ea order 3 for $24.95

NEW ANSCO OR EKTA CHROME 32 ASA 20 exp cart, 3 for 5.55 Proc. & Mtg....1.25

35mm RELOADS FRESH ANSCOLOR Daylight or Tungsten 20 Ex. 3 for 3.45 6—6.75; 12—12.95

ANSCOLOR Daylight or Tungsten. Price includes processing. 20-EXP. EACH 1.95 3 for 5.69

FRESH 36 EXP RELOADS Bkgrd X, Plus X, Sup XX — Any 6 1.95
VERICHROME, TRI-X, INFRA-RED VERICHROME — 6 for 2.98

DIRECT POSITIVE Makes B&W Transparencies 20 exp. 3/1.49; 36 exp. 3/2.25 DP Dev. Kit (shpd exp. only) 2.90

8x10 ENLARGING PAPER FRESH '56 Mfg 2nds
Contrast 1,2,3,4 100 500
SW Glossy or S Mt 3.49 15.75
DW Glossy or S Mt 3.95 17.50
Portraya GG DW 4.48 21.00

8½" x 11" KODABROMIDE M1-2-3-4—Enlarging Paper. SW. 1953 date. ROT Surplus. 250 Shts. 5.95

35mm 100' FRESH SAFETY SUPER XX PLUS X BKGRND X 2 for 4.75
3 rls any combin..7.25

FRESH 1956 EK Pack Fact/Boxt 100' Positive ..2.52 Dir. Pos...7.90 Tri X.....6.75

AERO EKTACHROME 100 ASA, 20 Exp., 3/1.49

24ASA Bkgrd. X Dupnt. 1 — 50 ASA Plus X Dupnt. 2 — 100ASA Super XX Dupnt. 3
100' Rls* 1.49 Any 3—4.25

35mm BULK DAY LOADER 4.95 Holds 100' 12 Empty Ctdgs.....75c

ANSCO SUPREME GUARANTEED—50ASA* Perfect for Summer. Original Fac. Pack. 36 exp. 6 For 1.98

FILM PACKS 2¼ x 3¼ B.K. Plus-X 3 for 2.95 — 4x5 CF Makes Neg. from Neg. 72 Shts. 2.98

FRESH 120-620 Fact. Boxt.
Extachrome Day/Tung.5/6.25
Anscochrome 32ASA .5/6.25
Tri-X, 200ASA ....6 for 3.00

120 or 620 ROLLS SUPER-XX* 10 ROLLS 2.49

Verichrome 120—6.20 Fresh! 10 Rolls 2.19

127—116—616 Roll Film 10 for 1.25 20 for 2.40

NOTICE: Incl. postage with order. 20% dep. on C.O.D.'s Excess refunded.
* U. S. Surplus guaranteed.
† Respooled from large rolls.

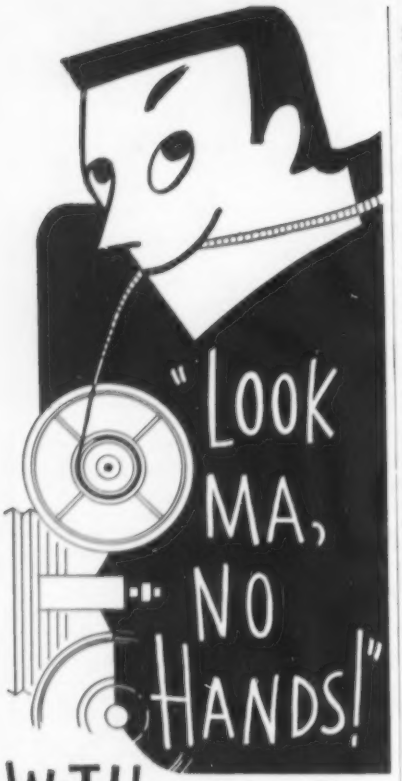
DELTA PHOTO SUPPLY
239 East 44th Street
New York 17, N. Y.
Dept. P9

FOR THE FINEST COLOR PROCESSING PRINTING
EKTACHROME, ANSCO & ANSCOCHROME PROCESSING
DIE-TRANSFER COLOR PRINTS
ATKINSON COLOR PRINT SERVICE
Write for Prices or Send Film.
7273 Santa Monica Blvd.
HOllywood 4-7531
Hollywood 38, Calif. Dept. P

CAMERA FANS . . . when in Wash., D. C. see Capital Camera
Leica Camera and Lenses (all models) Contax Cameras and Lenses—Telephoto Lenses—8 and 16 mm. Movie Cameras and Projectors (sound and silent).
Write For Your Photo Needs
CAPITAL CAMERA co.
1003 Pa. Ave. NW., 15th & G Sts. NW. Wash. D.C.

PHOTO JOURNALISM • ADVERTISING • ILLUSTRATION
GENERAL COMMERCIAL • ARCHITECTURAL • FASHION
EDITORIAL PORTRAITURE • PHOTO LAYOUT • LIGHTING

Study with professionals in California...
Learn photographic techniques of advertising, journalism, science, fashion with practicing artists and photographers! Art Center's 28-month course includes general studies. Degree. Co-educational. New terms Feb., June, September. Catalog. Write % Edward P. Adams, Director, 5353 W. 3rd St., Los Angeles 5, Calif.
THE ART CENTER SCHOOL
COLOR TECHNIQUES • INDUSTRIAL ILLUSTRATION



WITH self threading self winding fully automatic

Reel-Tainer

REEL & CONTAINER IN 1 UNIT

So simple it can be threaded in the dark! No fuss—no trouble. Just start the projector—lay the end of the film on the reel as it turns and the film is immediately secured without danger of tearing, scratching or bending the film.

No old-fashioned reels and cans. Reel-Tainer is the new all-in-one plastic, automatic, dustproof reel that offers complete title and footage visibility.

MODERNIZE YOUR METAL REELS WITH NEW FULLY AUTOMATIC Reel-Clutch FOR 16 MM REELS OVER 400 FEET ... 60¢

AT YOUR NEAREST PHOTODEALER OR APT CORP. · 4332 STOCKTON · SACRAMENTO · CAL.

Your stage should be 20 inches wide, 22 inches long, and 16 inches high (see diagram for all exact measurements). The floor of the stage is ¼-inch plywood, as is the front panel of the backdrop support, which is backed by a 1½-inch block. The bases (20¼ inches long) of the two upright side supports, the supports themselves (16 inches high), the connecting piece (20 inches long), and the two projecting arms (10½ inches long) are all 1¾ inches wide and ¾ inches thick. The side supports are hinged at the bottom; one-inch screen-door hooks lock them in an upright position. The extending arms can be detached by removing the pin by which they are hinged to the sides. While in position, the arms can be used to support photofloods, small flashlight spots, and parts of scenery. Various-size blocks of 1-inch plywood and odd-size pieces of ¼-inch plywood will serve to back and support different types of props. The horizontal connecting piece is primarily for use as a support to which photofloods can be clamped.

A few basic props are all you need for your scenes. Aluminum foil realistically simulates water; salt is a perfect stand-in for snow; and small bits of rock and stones from the backyard expand into cliffs and mountains in a Lilliputian setting. A supply of thumb tacks, various-size spring clamps, and Scotch tape should be kept on hand to hold props in place.

For your backgrounds, foregrounds, walls, etc., paper and cardboard in a variety of colors are available at any artist supply store. A file of finely detailed color photographs, including shots of skies, clipped from magazines and mounted on thin cardboard, adds to your background possibilities. Of course you're unlimited in your choice of subject matter—your imagination can be virtually unrestricted. Miniature china and plastic figures and miniature trees, leaves, flowers, and shrubs like those used in the accompanying illustrations are readily purchasable and lend themselves to any number of arrangements. Spring and summer seasons will enlarge your supply of weeds, flowers, and grasses; dried, they'll be available year round. A look around the house will uncover all sorts of further ideas.

Before designing and laying out your sets, make permanent marks on the floor of the stage indicating the range and depth of field of your camera lens. The width of the background need not be more than 10 inches if you are using a 35-mm camera set for 13 inches distance. These tabletops were shot with a Vito II equipped with a 3-plus portrait attachment.

When you've decided on a scene, really think out your lighting plan. The time you spend experimenting, blocking out unwanted light with mounted cardboard, using pencil flashlights for spotting, will be amply rewarding. A switchbox will cut down the voltage while you are positioning the lamps—or use 100-watt household bulbs, then replace them when you're ready to shoot.

To add more color, colored cellophane can be taped onto 12-inch square cardboard frames tacked onto plywood blocks for support and set in front of the lights. Blue, red, and yellow (and maybe green) alone or in combination will provide you with a full range of colors. The color can be intensified by either doubling the amounts of one color or decreasing the length of exposure. Be sure to keep the frames a reasonable distance away from the floods to prevent disaster (especially if you're not using the switchbox or low-voltage temporary bulbs). If you want to use a solid background color, as was done in the shot of the frightened chipmunks, clamp an 18x24-inch sheet of colored paper to the front edge of the stage, bring it back, and curve it at the juncture of the stage and backdrop support, clamping it again at the top of the support. Using one single sheet this way eliminates distracting lines.

Even after you've shot several rolls of tabletops in color, you won't find yourself at a loss for new material. And you'll have a new outlet for your creativeness and ingenuity and an enthusiasm that will snowball no matter what the season.—▶

New Ways with Photograms

(Continued from page 93)

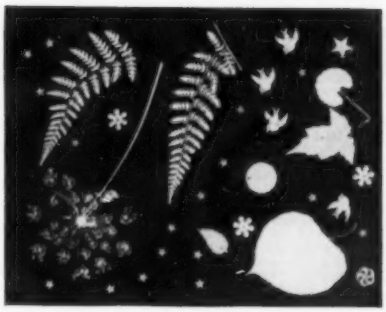
Ektacolor, and an Ansco A3 for Type 638, for periods up to five minutes.

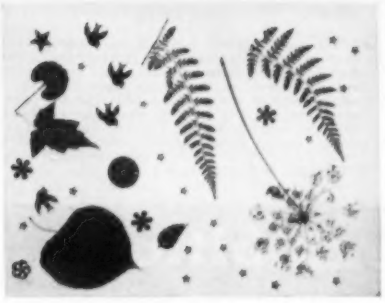
Simplicity in handling and processing printing-out paper makes it a real boon to people who just want to have some fun of an evening.

Exposures on P.O.P. take anywhere from six minutes (exposed by photoflood up close) to 15 minutes (exposed by daylight on an average sunny day). With these exposures, a pleasing maroon tone would be reached in about two to five minutes respectively: the extra exposure changes the color to a deep cordovan brown, and is needed to compensate for the bleaching that occurs when the paper is placed in a hypo bath to make the image permanent.

This bath can be a normal acid fixing solution, although most are too powerful for P.O.P. and tend to give rather yellowish results. The best solution is a mixture of hypo crystals and water, at the rate of 1 lb of hypo to ½ gal of water. Fix the P.O.P. for about five minutes, then wash for about 15 minutes. Drying should be done very carefully, since P.O.P. is a soft, unhardened emulsion. Best way is a gentle blotter treatment.

There are thousands of common objects and many techniques to give you pleasing patterns and textures for photograms. Flat objects are most common (leaves, cloth, cutouts from varying layers of tracing paper), but don't overlook three-dimensional and translucent objects (ashtrays, glasses) which cast interesting stress shadows when the light is kept at a low angle to the paper. Placing an object on the glass printing frame will result in a soft outline—if it's right on the paper the outline will be sharp. The objects can be moved around to various areas of the paper for exposure, as shown on page 93. In this line, string patterns are especially interesting, when the de-





Positive photograms *(above)* are easy, too. Fix, dry normal photogram *(top)*; place face down on unexposed sheet of P.O.P. in printing frame. Exposures are longer than normal due to absorption of light by paper base.

sign is rearranged partway through the exposure, resulting in a series of overlapping patterns. And positive photograms are something almost no one thinks of (*see above*). Just make sure the back of the first photogram is facing the exposing light. Exposures with this method may take as long as 30 minutes in bright sunlight.—

contests and markets

CONTESTS

THE CARLING CAMERA COMPETITION, which is being held in conjunction with the Massachusetts Department of Commerce, is awarding $6,000 in prizes for photographs of a promotional nature pointing up the vacation areas and scenic attractions of Massachusetts. The two top prizes will be $1000 Savings Bonds for the best pictures in black-and-white and color, with 223 additional prizes in each classification. An unlimited number of black-and-white prints and color transparencies may be submitted by entrants. Black-and-white print sizes requested are 5 x 7 and 8 x 10; color transparencies of any size are eligible. The contest closes November 15. For entry blanks and full information, write the Massachusetts Department of Commerce, 334 Boylston St., Boston, Mass.

GAINES DOG RESEARCH CENTER is offering prizes of $500, $250, and $100, respectively, to the three top winners of their 1955 dog photography contest. Photographs must have human interest and although people may appear in the picture the dog(s) must be the dominant feature. Contestants may submit an unlimited number of unmounted, unretouched black-and-white prints of any size; only prints accompanied by sufficient postage will be

You Get PICTORIAL QUALITY in RUSS

Deluxe COLOR PRINTS

AS LOW AS 20¢

for Full Size 2¼ x 3¼

RUSS PHOTO SERVICE is setting a new standard of quality and value. Thousands of discriminating customers are sending repeat orders regularly . . . and recommending us to their friends.

*RUSS-TONED PRINTS— For those who want a Soft-Toned, pictorial effect, we offer Russ-Toned prints, with an exclusive velvet finish. The pleasing matte surface permits retouching for special effects. Send us your film . . . we GUARANTEE every print.

Here's Real High Quality at Lowest Prices!

FULL SIZE 2¼ x 3¼ or 2¼ x 2¼ (CONTACT) *RUSS-TONED add 15¢ ea. 5 for $1.00

3 x 4¼ 50¢ each 3 for $1.25 *RUSS-TONED add 15¢ ea.

4 x 5 60¢ each 2 for $1.00 *RUSS-TONED add 25¢ ea.

5 x 7 3 for $2.25 85¢ each *RUSS-TONED add 25¢ ea.

8 x 10 2 for $3.25 $1.75 each *RUSS-TONED add 40¢ ea.

24 HOUR SERVICE All work is completed and RUSHED to you 24 hours after receipt.

COLOR FILM PROCESSING EKTACHROME & ANSCOCHROME 620 — 120 — 35mm only 75¢

STEREO USERS: Film Processing and Stereo Mounting (standard 35mm. 20 exp. cartridge) $1.50

Stereo Mounting only — each pair .10

KODACOLOR PRINTS Send only your kodacolor film negative 30¢ ea. 4 for $1.10

EKTACHROME 35mm FILM Brand New Factory Packed—Including film processing and one sample print. FILM ONLY — 20 exp. $1.50 only $2.15 Value $3.60

MINIMUM ORDER, $1.00. Sorry, No C.O.D.'s We pay (4th class) mail. For 1st class or special delivery, please include postage.

RUSS GUARANTEES QUALITY RESULTS

A. RUSS PHOTO SERVICE

P.O. Box 323, Cooper Station, New York 3, N. Y.

YOU CAN BE A TV CAMERAMAN

Send for FREE Booklet K-9

APPROVED FOR VETERANS

It's a short step from the nationally-known Television Workshop to a good-paying job in television. Work with the finest RCA cameras and video equipment in station-size studios, under the instruction of network experts. Graduates now working at leading TV stations throughout the nation. Previous experience unnecessary. Free placement service.

Day or Evening Classes

TV WORKSHOP

1780 Broadway, New York 19, N. Y. PLaza 7-3721

Can You Beat It?

35 mm COLOR FILM 20 exp. Cartridge 89¢ ea.

Available Daylight ASA 10 or Tungsten ASA 16

GUARANTEED FRESH!

Fast Processing Extra!

Regular 35 mm 20 slides mtd. $1.00

Stereo 15 pairs mounted $1.75

8 mm Spool Processing incl. $2.25

16 mm 100 ft. spool Proc. incl. $6.25

16 mm 50 ft. mag. Proc. incl. $4.25

Order Now! All Prices Post-Paid — In U.S.

Any Quantity! In Illinois add Sales Tax

SEND FOR FREE LITERATURE!

SOLAR CINE PRODUCTS, INC.

4247 South Kedzie • Chicago 32, Ill

ELITAR

Soligor

LENSES

give your camera new, unlimited range!

Now... at a price never before possible . . . add to your movie camera the versatility of wide angle and telephoto! The world's finest optics, made to the most exacting standards . . . Soligor gives the American movie-maker a completely new point-of-view.

For 8mm and 16mm cameras, for as little as $12.95 to $99.95.

For Professional movies, see Elitar at your dealer today.

NEW!
SOLIGOR 3"
Telephoto f1:5 coated.
Click stops . . . focusing from 4 ft. to infinity . . . depth of field scale . . . standard "C" mount . . . Removable lens hood. A precision lens, giving maximum resolving power.
$99.95

"World's Finest Optics"

Elitar

WRITE FOR CIRCULAR EP-9

OPTICAL DIVISION

ALLIED IMPEX CORP
17 West 17th St., New York, N.Y.
Eastern Distributor:
INTERSTATE PHOTO SUPPLY, New York 11, N. Y.

returned. For further information write Gaines Dog Research Center at 250 Park Ave., New York 17.

CARL ZEISS, INC., is sponsoring a contest for black-and-white photographs taken with postwar models of Zeiss Ikon cameras. A maximum of six pictures may be entered. They will be judged on technical excellence and general interest by a panel consisting of Don Bennett, APSA, *PSA Journal*; Jacob Deschin, FPSA, *The New York Times*; Kip Ross, *The National Geographic Magazine*; and Dr. I Schmidt, FPSA. A total of 32 prizes include a first prize of a Contax IIIa with 50-mm Sonnar *f*/1.5 lens and built-in exposure meter, second prize of Contax IIa with 50-mm Sonnar *f*/1.5 lens, and two third prizes of a Contaflex II with built-in exposure meter. Full information and rules and entry form may be obtained from Zeiss Ikon dealers or by writing Carl Zeiss, Inc., 485 Fifth Ave., New York 17, N. Y. Deadline is November 15.

BOYS' LIFE magazine opened its 1955 photography contest May 1 to boys and girls who will not have passed their 19th birthday by September 15, 1955. Over $2,000 worth of photo-equipment prizes will be awarded among the seven following groups of entry: Color Slides; Camping and Hiking; Action in Sports; People; Animals; Landscapes and Buildings; Trick and Gag photos. Photographs will be judged within each class of entry but duplicate prints may be entered in any class under which it can qualify. No more than one prize may be won by a contestant in each category. Black-and-white photographs must be no larger than 8x10" and all entries must be accompanied by the following information: Name, address and age; type and make of camera, film, flashbulbs, and filter used; when and where picture was taken and title of picture. Model releases must be available on request for any recognizable people in the pictures. Photographs and transparencies will be returned only if covered by return envelope and postage. Submissions to the contest and requests for further information should be sent to Boys' Life Photo Contest, 2 Park Avenue, New York 18, N. Y.

MARKETS

AUTO LAUNDRY NEWS is looking for amateur photographers throughout the United States who can supply them with photographs of minute-car-wash establishments. Prices from $5 to $25 will be paid, depending on the use of the prints. Send prints and requests for further information to Mr. Robin King, editor, *Auto Laundry News*, Capuchinas 55, San Jose, Insurgentes, Mexico 19, D.F.—

Calendar of exhibitions

Photographic Salon, Iowa State Fair, Des Moines, Iowa.
Closes August 17, 1955.
Entry fee not required, number of prints on request.
On exhibit at Iowa State Fair, August 27 through September 5, 1955.
For information and entry blanks, write Lloyd B. Cunningham, Secretary, Iowa State Fair, Des Moines, Iowa.

11th Annual International Exhibition*, Salt Lake Photochrome Club, Salt Lake City, Utah.
Closes August 20, 1955.
Entry fee $1, four slides.
On exhibit in Salt Lake City, September 7 through 16, 1955.
For information and entry blanks, write Reed Wood, 2223 E. 13th St. S., Salt Lake City, Utah.

15th International Focus Fotosalon, Amsterdam, Netherlands.
Closes August 25, 1955.
Entry fee $1, four prints or four slides.
On exhibit in Amsterdam, September 24 through October 9, 1955.
For information and entry blanks, write Focus Ltd., Bloemendaal, Netherlands.

11th Open Exhibit of Technical Photography*, Photographic Society of America, Boston, Mass.
Closes August 25, 1955.
No entry fee required, no limit to number of entries.
On exhibit at Sheraton Plaza Hotel, Boston, Mass., October 5 through 8, 1955.
For information and entry blanks, write Henry J. Fassbender, 36 Couchman Ave., Rochester 17, New York.

2nd Annual Central Washington Photographic Salon, Yakima Camera Club, Yakima, Wash.
Closes August 27, 1955.
Entry fee $1, four prints allowed.
On exhibit in Yakima from Sept. 21 to 25, 1955.
For information and entry blanks, write G. S. Maring, 218 N. 35th Ave., Yakima, Wash.

18th Memphis Exhibition of Photography, Memphis, Tenn.
Closes September 1, 1955.
Entry fee $1, number of slides and prints on request.
On exhibit Brooks Art Gallery, Memphis, Tenn., September 11 through 26, 1955.
For information and entry blanks, write Mrs. Louise Clarke, Brooks Art Gallery, Overton Park, Memphis 12, Tenn.

1st Biennial International Exhibition of Mountain Art Photography, Club Alpino Italiano-Societá Alpinisti Tridentini, Trento, Italy.
Closes September 5, 1955.
Entry fee $1, four prints allowed.
On exhibit in Trento, September 25 through October 16, 1955.
For information and entry blanks, write Societá Alpinisti Tridentini, Via Manci, 109, Trento, Italy.

1955 Northwest International Photographic Salon*, Western Washington Fair, Puyallup, Wash.
Closes Sept. 4, 1955.
Entry fee $1, four prints allowed.
On exhibit at Western Washington Fair, Puyallup, Sept. 17 to 25, 1955.
For information and entry blanks, write Western Washington Fair Association, Puyallup, Wash.

Photographic Society of America Annual Convention*, Boston, Mass.
Closes September 6, 1955.
Entry fee and number of prints on request.
On exhibit at Sheraton Plaza Hotel, Boston, Mass., October 5 through 8, 1955.
For information and entry blanks, write Arthur B. Falkson, Exhibitions Chairman, 825 Summer St., Boston 27, Mass.

7th Pittsburgh All-Color Exhibit, Int.*, The Natural Color Camera Club of Pittsburgh, Pittsburgh, Pa.
Closes September 6, 1955.
Entry fee and number of slides, stereos, or prints on request.
Slides on exhibit at Arts & Crafts Center, Pittsburgh, Pa., September 18 and 25, 1955; Belles Lettres Club, Oil City, Pa., September 24, 1955; Carnegie Lecture Hall, Oakland, Pa., September 20, 1955. Prints on exhibit at Arts & Crafts Center, Pittsburgh, Pa., October 8 through 23, 1955.
For information and entry blanks, write T. C. Wetherby, 116 Avenue L, Pittsburgh 21, Pa.

Chicago International Salon of Photography*, Chicago International Photographic Salon Association, Inc., Chicago, Ill.
Closes Sept. 10, 1955.
Entry fee $2, four prints allowed.
On exhibit at Museum of Science and Industry, Oct. 2 to 30.
For information and entry blanks, write Miss Mary Abele, 2617 Hartzell Street, Evanston, Ill.

International Exhibition of Color Photography, Color Photographic Association of Canada, Inc., Toronto, Canada.
Closes September 10, 1955.
Entry fee $1, four slides or prints allowed.

On exhibit in Toronto on October 1, 1955.
For information and entry blanks, write George Boyd, Exhibition Chairman, 11 Faircroft Blvd., Toronto 13, Ontario, Canada.

1st International Color Slide Salon of New York, The Photo Society of New York, New York City.
Closes September 15, 1955.
Entry fee $1, four slides allowed.
On exhibit at Mott Street School Auditorium, Chinatown, New York City, October 1 and 2, 1955.
For information and entry blanks, write 1st International Color Slide Salon of New York, 44 Mulberry St., New York City 13.

3rd Luxembourg International Color Slide Exhibition*, Camera-Luxembourg.
Closes September 19, 1955.
Entry fee $1, four slides allowed.
On exhibit at the Carrefour House, Luxembourg, October 11 and 18; at Dudelange, October 12; at Differdange, October 13; at Esch, October 14; at Wiltz, October 15; at Ettelbruck, October 16 and 23; and at Petange, October 20, 1955.
For information and entry blanks, write René Jentgen, Exhibit Chairman, rue Felix de Blochausen, Luxembourg, Grand Duchy.

4th Mexico International Salon of Photographic Art*, Club Fotografico de Mexico.
Closes September 22, 1955, black-and-white; October 1, 1955, color.
Entry fee $2, four prints; $1, four slides or four stereo.
On exhibit at Club Fotografico de Mexico, Mexico, D.F., October 20 through November 10, 1955.
For information and entry blanks, write Ing. Jose Lorenzo Zakany, Venustiano Carranza 69, Mexico, D.F.

3rd Annual International Exhibition of Colour Photography, Stockton-on-Tees Photo-Colour Society, Stockton-on-Tees, England.
Closes September 29, 1955.
Entry fee $1, four slides or prints allowed.
Exhibition opens at Holy Trinity Hall, Yarm Lane, Stockton-on-Tees, England, October 22, 1955.
For information and entry blanks, write James B. Milnes, Hon. Entries Secretary, 9 Ellen Avenue, Stockton-on-Tees, England.

8th Magic Empire Color Slide Exhibit*, Tulsa Camera Club, Tulsa, Okla.
Closes September 30, 1955.
Entry fee $1, four slides allowed.
On exhibit at Philbrook Art Center, Tulsa, Okla., October 17, 18, and 24, 1955; at Veterans Hospital, Muskogee, Okla., October 19, 1955.
For information and entry blanks, write Joe E. Kennedy, Exhibit Director, 1029 Kennedy Bldg., Tulsa 3, Okla.

The Bath International Photographic Exhibition*, The Admiralty Camera Club and The Bath Photographic Society, Bath, England.
Closes September 30, 1955 (entry forms), October 3, 1955 (entries).
Entry fee $1, four prints and/or twelve slides.
On exhibit at Victoria Art Gallery, Bath, England, October 13 through 29, 1955.
For information and entry blanks, write P. B. Lauder, Honorary Exhibition Secretary, 11a Entry Rise, Combe Down, Bath, England.

Pretoria Centenary International Salon of Photography, The Pretoria Photographic Society, and The Photographic Society of Southern Africa, Pretoria, South Africa.
Closes September 30, 1955.
Entry fee $1, four prints allowed.
On exhibit at City Hall, Pretoria, South Africa, November 5 through 12, 1955.
For information and entry blanks, write Oscar Abramovitz, Salon Secretary, P. O. Box 1065, Pretoria, South Africa.

15th Victoria International Salon of Photography and Color Exhibition*, Victoria Camera Club, Victoria, B. C., Canada.
Closes October 15, 1955.
Entry fee $1, four slides allowed; $1.50, four prints.
On exhibit at Arts Centre of Greater Victoria, November 13 through 20, 1955.
For information and entry blanks, write James A. McVie, Salon Director, 2171 Bartlett Avenue, Victoria, B. C., Canada.

Camera Club 6th International Colour Print Exhibition, London, England.
Closes October 1, 1955.
Entry fee $1, color prints only.
On exhibit at The Camera Club, 23 Manchester Square, London, W.1., England, October 30 through November 27, 1955.
For information and entry blanks, write E. C. Codd, Hon. Secretary, The Camera Club, 23 Manchester Square, London, W.1., England.

11th International Color Slide Exhibition, Chicago Color Camera Club, Chicago, Ill.
Closes Oct. 10, 1955.
Entry fee and number of prints on request.
On exhibit at Museum of Science and Industry Oct. 30 and Nov. 5 to 6, 1955.
For information and entry blanks write Frances Hutton McQuown, 8 South Michigan Ave., Chicago 3, Ill.

Photographers' Exhibit Society's 4th International Color-Slide Salon, Cleveland, Ohio.
Closes October 10, 1955.
Entry fee $1.25, four slides allowed.
On exhibit in Cleveland, October 31 through November 11, 1955.
For information and entry blanks, write Mary-Jane Matheson, 12317 McGowan Ave., Cleveland 11, Ohio.

Arizona Fair Exhibition of Photography*, Phoenix, Arizona.
Closes October 12, 1955.
Entry fee $1.50, four prints; $1, four slides.
On exhibit at Arizona State Fair Grounds, Phoenix, Arizona, November 4 through 13, 1955.
For information and entry blanks, write Arizona State Fair, Phoenix.—

Nikor life-time stainless steel tanks are available for all roll film sizes, and in models for cut film and film pack.

Process two or more rolls . . . in the same solution, and in the same time required for only one! This is now the most popular way, because it's the quickest, most economical way to do the job.

There are NIKOR life-time stainless steel tanks for any multiple processing job. The #33 tank for example takes two 35mm, 20 or 36 exposure rolls. Another takes four 35mm rolls. And extra tall tanks take 8, 11, and 14 rolls. And since reel diameters are the same, these tanks also are used for processing #120 film.

Nikor multiple as well as individual tanks are available through photo dealers. Complete literature sent on request.

Burleigh Brooks, Inc. 10 West 46th Street, New York 36, N. Y.

2 NEW Linhof Combi Tripods

Compact, light, attractively styled and precision built in the Linhof tradition. Each one has a center-post for ease in raising and lowering camera—acts as an extra support in low-level shooting. Made of corrosion-resistant hydronalium. Legs fitted with rubber feet for indoors and spikes for outdoors. Will support heaviest movie and press cameras. Close down to 18" to fit press cases and extend to 55" for use.

Linhof
Corporation of America

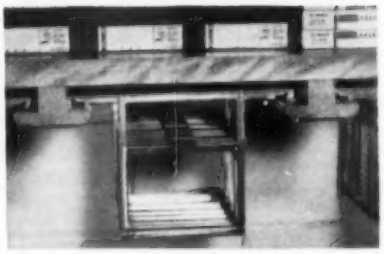
At Leading Dealers or write to
Sole Distributor
KLING PHOTO CORP.
235 Fourth Ave., New York 3, N. Y.
7303 Melrose Ave., Los Angeles 46, Cal.

photo tips— short cuts to better pictures

To Remove Broken Flashbulb

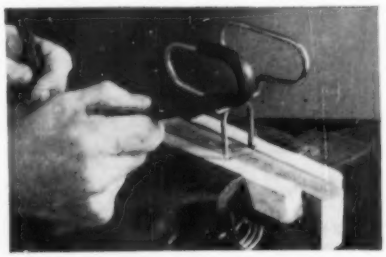
On those annoying occasions when a flashbulb breaks off in the flashgun, there always is danger of cutting your fingers on the sharp, jagged edges of glass when removing the base of the broken bulb. Use of an ordinary, large bottle cork will minimize that risk. Press the cork down gently on the points of the broken glass (but firmly enough for the points to enter the cork) then remove the base of the bulb by turning or manipulating the cork. —*Marshall Lincoln, Ft. Wayne, Indiana.*

Storing Film Hangers



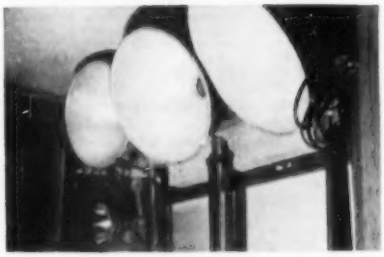
A convenient and space-conserving arrangement for storing film hangers is shown in the accompanying illustration. Hanger supports are constructed from a block of wood approximately 1½ by 3 inches by width of the darkroom shelf, and notched 1 inch square on two corners. These supports then are attached firmly to the underside of the shelf, handy for film-loading. In this way, the hangers occupy only a small space.—*R. Robinson, Ayden, North Carolina.*

Reflector Clamp Repair



When the rubber covering on the clamp of a light-reflector becomes worn, it can be renewed easily and inexpensively with automobile windshield-wiper tubing—or with tire-pump replacement hose. While affixing the tubing, a jig made of two wooden blocks, with saw-cut grooves, will hold the clamp and prevent pinched fingers. A bench vise and a third, solid block of wood will keep the material firmly in place, or a C clamp can be used. —*G. Carlson, Chicago, Illinois.*

Added Storage Space



If closet storage space for your light-stands has become a problem, here's one method of solving it. Two boards, nailed or screwed together to form a shelf-type bracket, are attached to the wall of a closet, and slotted to accommodate the light stands, so that tops of stands are at ceiling height. In this way, the equipment is kept neatly in order and light-cords are prevented from getting tangled, while utilizing space otherwise wasted.—*R. E. Wiles, Agawam, Mass.*

Cleaning Aid

An ordinary pipe-cleaner can be used to advantage for cleaning those hard-to-get-at places in a camera—cable-release sockets, exposed flash contacts, interiors. Their size and flexibility makes it possible to use them with very little effort, and their soft covering picks up dust from small interstices and surfaces. To avoid raveling and any possible lint deposit, each cleaner should be used only once, then thrown away. They are very inexpensive.—*J. P. Spilko, Erie, Pa.*

Why not send in your ideas for better picture-making and darkroom aids? We will pay $10 for each photographically illustrated Tip accepted—$5 if not illustrated. Material must be original and not previously published.

GUIDES TO BETTER PHOTOGRAPHY

***Very few industries are as lavish with their instructional literature as the photographic industry. There is a wealth of information, most of it free, to help you make better pictures. Please use coupon on this page for booklets in which you are interested, enclose required remittance, and mail directly to* POPULAR PHOTOGRAPHY.**

CAMERAS, STILL

1. BOOKLET: "Expert Camera Operation Made Easy." 14 pp., illus., 5¢ ea. Ansco.

2. BOOKLET: Better Photography Made Easy. 60 pp., illus. 25¢. Ansco.

3. BROCHURE: How to take pix of TV programs. Argus.

4. BROCHURE: Information on copy and close-up. Argus.

5. BROCHURE: Especially for teachers desiring to use a camera in classroom work. Argus.

6. BROCHURE: List and prices of 400 items for Exakta cameras. Exakta Camera Co.

7. BOOKLET: How to Take Prize Winning Pictures With The New Graphic 35. 24 pp., illus. Graflex.

8. BOOKLET: For Prize Winning Pictures—Graflex., Specifications, etc. 32 pp., illus. Graflex.

9. BOOKLETS: "Rollei," 12 pp., illus. description and details, Rolleiflex, Rolleicord.

10. BOOKLET: The Practical Accessories for Rollei Cameras. 24 pp., illus. Burleigh Brooks.

11. BROCHURE: "Realist 35"; detailed facts on Model A and B; accessories. Realist, Inc.

12. BOOKLET: "The Voigtlander Line." Complete details, description full line; illus. Willoughby's Wholesale.

13. BOOKLET: The Robot Camera in Science and Industry. 4 pp., mimeo; Intercontinental Marketing.

14. BOOKLETS: (a) The Royal Robot; (b) Robot Underwater Camera; (c) Robot Accessories. Intercontinental Marketing.

15. BOOKLET: Omega 120; data description; Simmon Bros.

16. CATALOG: (a) Leica M-3; 10 pp., illus., (b) Product Directory, includes every piece of Leica equipment; 72 pp., illus. E. Leitz.

17. BOOK: (a) Leica Manual; 400+pp., illus., twelfth edition, with M-3 supplement; cloth bound; $5.00. (b) Pocket Leica Book; 192 pp., illus., hard cover, $2.95; (c) Close up and Photomicrography with the Leica, 35¢; all obtainable thru dealers only. E. Leitz.

18. BROCHURE: Commercial Applications of the Stereo-Realist. 4 pp., illus., plus 12 pages of detailed information relating to modern selling. Realist, Inc.

19. BROCHURE: Realist 45, description, illus. Realist, Inc.

20. BOOK: Stereo Realist Manual. A complete guide to Stereo Photography. $6.00 Morgan & Lester.

CAMERAS, MOTION PICTURE

21. BROCHURE: The Auricon Cine-Voice. 16mm camera for professionals. Berndt-Bach, Inc.

22. BROCHURE: Same as 21, except for home movie makers.

23. BOOKLET: How to use your Cine-Voice. 16 mm sound-on-film Recording Camera. Berndt-Bach.

24. CATALOG: 40 pp., illus. Auricon Cameras. Berndt-Bach.

25. BOOKLET: Cameras by Revere.

26. BOOKLET: How To Take Better Sports Films. 24 pp., illus. Paillard Products.

27. BOOKLET: How To Take Better Vacation Movies, illus., charts. Paillard Products.

28. MAGAZINE: The Bolex Reporter, monthly, available thru franchised dealers only. Paillard.

MOTION PICTURE ACCESSORIES

29. BOOKLETS: (a) Features and operation of Curvamatic Splicer, (b) Features of hi-fi "Balanced Tone" Tape Recorders; (c) Motion Picture Equipment. Revere Camera.

30. BOOKLET: Curvamatic Splicer; details, data. Revere Camera.

31. BOOKLET: "Home Movies the New Craig Table Top Way"; 20 pp., illus.; including tips on tricks, etc. movie editing. Kalart.

LENSES

32. BOOKLETS: (a) Schneider Lenses; 10 pp., illus. (b) Schneider Additional Lenses, from 24 x 24 mm to 60 x 60 mm; (c) Xenotar; (d) Angulon; (e) Tele-Xenar; (f) Xenon; (g) Symmar; (h) Cine-Lenses, from 6.5 to 105mm; (i) Componon, Componar; (j) Xenor, general purpose lens. All well illustrated. Burleigh Brooks.

33. BOOKLETS: (a) Raptar 8mm cine lenses; (b) Raptar 16mm cine; depth of field, projection charts. Wollensak.

34. BOOKLET: How to Have More Fun with Your Camera. Wollensak.

35. CHART: How to use Two Ednalite Portrait Lenses; Ednalite.

36. BROCHURE: Portrait Lens Instructions; tables, charts on +1, +2, +3 portrait lenses. Ednalite.

37. BOOKLET: Leica Lenses; 34 pp., illus.; data descriptions. E. Leitz.

PROJECTORS, SLIDE

38. BOOKLET: How to Select a Slide Projector. American Optical.

39. BOOKLET: Features of Revere Projectors. Revere Camera.

40. LEAFLET: Engineered projection equipment; data, details. Viewlex.

FLASH EQUIPMENT

41. CALCULATOR: Vest-pocket size; b&w and color settings at varying distances, speeds, f-stops. 10¢. Westinghouse.

42. BROCHURE: The ABC of Flash Photography; guide to how, when, why and how to use flash bulbs. Westinghouse.

43. BROCHURE: Your guide to better pictures thru better lighting; comprehensive discussion of Westinghouse bulbs.

44. BOOKLET: Betty Furness Says, illus.; on projection lamps for home movies. Westinghouse.

45. FOLDER: Flash is Easy—Flash is Fun. Complete flash instruction for advanced, amateur, beginner. Sylvania.

46. BOOKLET: How to take Better Picture and Have More Fun with Flash. 32 pp., illus. Sylvania.

47. BOOKLET: "Color Flash with Box Cameras." Sylvania.

48. BOOKLET: How to Throw a Snapshot Party; 24 pp., illus. Sylvania.

49. CARD: Wallet Size, gives correct F-stops. Sylvania.

50. BROCHURE: Basic Lighting Placement, illus. Sylvania.

51. SPECIFICATION SHEETS: (a) Blue Dot Line; (b) projection lamps; (c) darkroom and enlarger lamps; (d) Super-floods. Sylvania.

52. BOOKLET: Helpful Hints on Flash Photography. 16 pp., illus. Kalart.

53. BOOKLETS: Secrets of Press Photographer, by Joe Costa. 20 pp., illus. Kalart.

54. FOLDER: (a) Sun-Lite II; description & illustrations on speedflash; (b) Sun-Lite 500. Hershey.

55. BOOKLET: "Strobonar Units," 16 pp., illus. Heiland.

56. BOOKLET: "Synchro-Mite," 8 pp., illus. flash units. Heiland.

57. BOOKLET: Professional Flash Synchronizers; including solenoids, reflectors, battery cases; 16 pp., illus. Heiland.

58. BOOKLETS: "Synchro Units"; 8 pp., illus. Heiland.

59. FOLDERS: (a) Fotoeye; (b) Koiled Kord; (c) Strobonar Six; (d) Strobonar Seven. Heiland.

60. FOLDERS: (a) Graflite; (b) Stroboflash. Graflex.

61. FOLDER: "Triangle Lighting"; formula for taking indoor pix with light. General Electric.

62. BOOKLET: (a) Photoflash Tips; (b) Bright Ideas—flash pix of parties, kids, adults; (c) Photolamp Data—lighting, exposure, film speed for flash, flood, other lamps. General Electric.

63. BOOKLET: The M-2 Bulbs; data, information on the "tiny" bulbs. General Electric.

64. BOOKLET: "Flash"; data on flash for Argus cameras. 8 pp., illus. Argus.

65. BOOKLETS: Eveready Battery Engineering Bulletin on flash photography, 12 pp., illus., issued periodically. National Carbon Co.

66. BROCHURE: Eveready Batteries, data, helpful information "B", "B-C" batteries. National Carbon Co.

PROCESSING EQUIPMENT AND MATERIALS

67. BOOKLET: "How to Buy an Enlarger." Federal Mfg. & Engineering.

68. LEAFLETS: (a) Time-O-Lite Printer; (b) Time-O-Lite Meters and Switches. Industrial Timer.

69. LEAFLETS: (a) Nikor Developing Tanks; (b) Nikor Film Processing Machine. Burleigh Brooks.

70. BROCHURE: Veigel Enlargers; description, data Exact 35, Amatex 35, Exact 66, Burleigh Brooks.

71. BOOKLET: "Developing & Printing Made Easy", 64 pp., illus., complete course in developing, printing, enlarging. 25¢ Ansco.

72. BOOKLET: "Color Photography Made Easy"; 96 pp., illus.; data on exposing and processing Ansco color film and Printon. 50¢, Ansco.

73. BOOKLET: "Ansco Photographic Papers"; 80 pp., illus., complete data Ansco papers for b&w photography. 25¢. Ansco.

74. BOOKLET: "Formulas For Black & White Photography"; 48 pp., illus.; plus non-technical discussion of elementary photographic chemistry; 10¢. Ansco.

75. CATALOGS: Omega A-2; B-7; B-8; D-2; D-3; E-5; (one on each model, specify which you want); Simmon Bros.

76. BROCHURE: Focomat Enlarger; data, description; E. Leitz.

EXPOSURE METERS

77. LEAFLET: GE Exposure Meters; significant features which adopt one of three GE meters to specific requirements. General Electric.

78. BOOKLET: Color Control Meter and Variable Color Filter; how to achieve full control of color; General Electric Co.

PICTURE TAKING ACCESSORIES

79. FOLDERS: (a) How to Make Better Pictures with a Quick-Set Tripod, 8 pp., illus.; outlines use of tripods with various types of cameras and situations; (b) "Whitehall Tripods," 6 pp., illus. Quick-Set.

FILM; PAPER

80. BOOKLET: Features and instructions on uses of Diaversal Enlarging Paper. Revere Camera.

81. BOOKLET: "Ansco Films"; Complete data on b&w, pack, roll, sheet, 35mm, 80 pp., illus.; 25¢. Ansco.

82. CALCULATOR: "Exposure Guide"; full exposure directions for color; 25¢; Ansco.

VIEWERS

83. BROCHURE: 4 pp., illus.; data, details, 35mm Opta-Vue hand viewer; Optics Mfg. Co.

SLIDES, STEREO

84. BOOKLET: Features of Shield 'N Vue Slide Projectors. Revere Camera.

TAPE RECORDERS

85. BOOKLET: Features H-F "Balanced-Tone" tape recorder, accessories. Revere Camera.

86. CIRCULAR: (a) Model 37C; (b) Model 47A; description, data. Federal Mfg. & Eng. Corp.

Use this coupon only to order booklets.

855

Please encircle the key number of each booklet you wish to receive, and enclose correct amount indicated for those booklets requiring remittance. We do not accept stamps.

No. of Booklets

Amt. Enclosed

Mail to: Booklets, POPULAR PHOTOGRAPHY, 366 Madison Ave., N.Y. 17, N.Y.

1	2	3	4	5	6	7	8	9	10	11
12	13	14a	14b	14c	15	16a	16b	17a	17b	17c
18	19	20	21	22	23	24	25	26	27	28
29a	29b	29c	30	31	32a	32b	32c	32d	32e	32f
32g	32h	32i	32j	33a	33b	34	35	36	37	38
39	40	41	42	43	44	45	46	47	48	49
50	51a	51b	51c	51d	52	53	54a	54b	55	56
57	58	59a	59b	59c	59d	60a	60b	61	62a	62b
62c	63	64	65	66	67	68a	68b	69a	69b	70
71	72	73	74	75	76	77	78	79a	79b	80
81	82	83	84	85	86a	86b				

NAME (Please Print) .....

ADDRESS .....

CITY ..... **ZONE** ..... **STATE** .....

Learn to Earn at

Considered by most, the best

BROOKS INSTITUTE OF PHOTOGRAPHY

by Howard Rink—Brooks Institute Student

Study Professional Photography in beautiful Santa Barbara

Portraiture
Commercial
Industrial
Color Printing
Motion Picture

at the World's most beautiful photographic school

BROOKS INSTITUTE, Dept. 5
Santa Barbara, California

Gentlemen: Please send me full descriptive literature. I am interested in

☐ 24-month course ☐ Short Course (still)
☐ Motion Picture Course

Name.....

Street.....

City..... Zone.... State.....
☐ I am a Veteran ☐ Non-Veteran

The ONE Case

for MINIATURE and REFLEX CAMERA OUTFITS

Selected top grain cowhide —chamois lining

OMNICA *Convertible*

You select and arrange the interchangeable fittings to hold your miniature or reflex or both—plus accessories—according to your personal needs.

Case complete with camera clamps..... $49.50
Accessory fittings as required.....from $1.35

For details, see your dealer or write

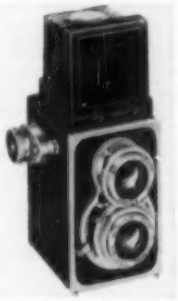
KLING PHOTO CORP.

235 Fourth Ave., New York 3, N. Y.
7303 Melrose Ave., Los Angeles 46, Cal.

what's new — Trade Notes and News

All data and descriptions ascribed to products listed herein are those claimed by the manufacturers and distributors, and listings are not to be construed as endorsements by POPULAR PHOTOGRAPHY. For further information write to address given in trade note.

CAMERAS & ACCESSORIES



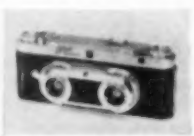
SUPER RICOHFLEX, a 2¼x2¼ twin-lens reflex camera accepting a 35-mm back, is introduced by Riken Optical Ind., Ltd., 521 Fifth Ave., New York City. Among features are 80-mm color-corrected *f*/3.5 lens; FX synchronized shutter with speeds to 1/200 sec; magnifier for critical groundglass focusing; depth-of-field scale. Price is $29.95. Another model, with Auto-Stop for automatic film advance, is $39.95. Auto-Stop attachment available separately for $4.95; 35-mm back, $9.95; close-up adapter, $4.50; self-timer, $2.95; lens shade, $2.75.

EXAKTA CAMERA CO., 705 Bronx River Rd., Bronxville 8, N. Y., offers a brochure on the 35-mm automatic Exakta VX single-lens reflex camera and accessories, and a catalog entitled **Equipment Information From Exakta,** covering the complete Exakta line. Both are free upon request.

ACCURA EYE-LEVEL FINDER for the Ricohflex enables the user of this camera to see a right-side-up, unreversed groundglass image at eye level. All optics are coated and the Finder is instantly removable for waist-level focusing. Distributed by Photographic Imp. & Dist. Corp., 135 Broadway, New York City, the price is $7.95.

KALLOFLEX AUTOMAT is a 2¼x2¼ twin-lens reflex camera introduced by OPTRA, Inc., 465 California St., San Francisco 4. Among features are: 75-mm Prominar *f*/3.5 taking lens; shutter speeds to 1/500 sec & B; synchronized for regular and electronic flash; automatic film transport with exposure counter visible from the top; plano-convex groundglass viewing surface; film-type and -speed reminder knob. Price is $149.50; case, $10.50.

RICOH 35 is a 35-mm camera with a rapid-advance lever positioned on the bottom of the camera body. Other features are FX synchronized shutter with speeds to 1/200 sec & B; single-window range-viewfinder; 45-mm color-corrected *f*/3.5 lens. Price, including flashing unit and leather case, is $59.95. Accessories include close-up adapter, $6.50; self-timer, $2.95; and lens shade, $2.75. Details available from Riken Optical Ind., Ltd., 521 Fifth Ave., New York 17.



EDIXA STEREO IIA is introduced by Camera Specialty Co., Inc., 705 Bronx River Rd., Bronxville 8, N. Y. This coupled-rangefinder camera features two matched 35-mm Steinheil Cassar *f*/3.5 lenses; focusing from 3.3 ft; a rapid-wind lever which also cocks the shutter; Pronto shutters with speeds of 1/25, 1/50, 1/100, and 1/200 sec; synchronization for regular and electronic flash; direct eye-level viewfinder; automatic exposure counter; cable release and tripod sockets. This model will yield 20 stereo pairs from a 20-exp stereo roll and 29 pairs from a 36-exp roll. Price is $79.50.

HANIMAR 88, a 35-mm camera designed for color work, is introduced by Hanimex (U.S.A.) Inc., 593 Market St., San Francisco. It features interchangeable lenses (normal *f*/2.8 and a 70-mm *f*/6.3 telephoto); shutter speeds from 1/25 to 1/250 sec.; automatic flash synchronization; spin-knob film advance counts exposures and cocks shutter; sprocketless film guides; all-metal body. Price is $61.85, including carrying case and strap.

SPLIT-IMAGE RANGEFINDERS for twin-lens reflex cameras are announced by Spiratone, Inc., 49 W. 27th St., New York City. A groundglass to which two prisms are attached replaces the original camera groundglass. Maximum sharpness is obtained for any given point by focusing at a straight line visible at an angle on the center of the groundglass. Available in three models (RO for Rolleis, RI for Ricohflex; and C-G for Ciroflex and Graflex 22 cameras), price is $4.95.

LENSES & ACCESSORIES

HASSELBLAD 1000F, a single-lens reflex camera, is now available with an 80-mm Zeiss-Tessar *f*/2.8 lens. Focusing range is from infinity to 20 in. from the film plane. Lens and roll-film interchangeability remain unchanged. Price is $379.50. More information available from Willoughbys-Wholesale, Hasselblad Div., 110 W. 32nd St., New York 1.

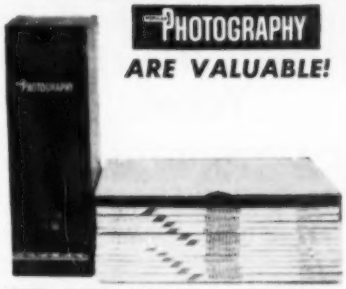
NIKON INC., 277 Fifth Ave., New York 16, announces a 25-mm Nikkor *f*/4 ultra-wide-angle lens, claimed to be without spherical aberration. Focusing range is from three ft to infinity and click-stop diaphragm stops down to *f*/22. Price, including snap-on Ser. VII filter holder and sunshade, is $169.50. More information available.

CORONAR is the name of a versatile 135-mm *f*/4.5 lens. It has four elements, is fully coated, has click stops, and is mounted in a black-anodized barrel. Covering the 5x7 size sharply, it can be used as a semi-wide angle lens for view cameras although its use is intended primarily with bellows units on Exakta, Praktica, Contax S, Leica, and Canon cameras. Another application is for 4x5 enlargers. Available in three basic mounts to attach to the Bellowscope and extension tubes available for the above cameras, the price is $19.95. The distributor is Spiratone, Inc., 135-06 Northern Blvd., Flushing 54, N. Y.

AUXILIARY WIDE-ANGLE lens for 8-mm cameras screws into any ½-in. Wollensak, Elgeet, or Nikkor lenses, giving the coverage of a 9-mm wide-angle lens. Price of $9.95 includes two screw-in adapters. Details available from Photographic Importing & Dist. Corp., 135 Broadway, New York.

CINE LENSES for B&H 220 and 252, and Kodak Brownie *f*/2.7 and *f*/1.9 movie cameras, are announced by Wollensak Optical Co., 850 Hudson St., Rochester 21, N. Y. A five-element telephoto lens provides 2½x magnification and a four-element wide-angle attachment lens covers four times the area covered by the normal lens alone. A special adapter ring allows usage of either lens on all four cameras and accepts size 5.5 filters. Prices are $22.95 each and finders are priced at $3.

YOUR COPIES OF POPULAR PHOTOGRAPHY ARE VALUABLE!



KEEP THEM NEAT . . . CLEAN . . . READY FOR INSTANT REFERENCE!

Now you can keep a year's copies of POPULAR PHOTOGRAPHY in a rich-looking leatherette file that makes it easy to locate any issue for ready reference.

Specially designed for POPULAR PHOTOGRAPHY, this handy file—with its distinctive, washable blue Kivar cover and 16-carat gold leaf lettering—not only looks good but keeps every issue neat, clean and orderly.

So don't risk tearing and soiling your copies of POPULAR PHOTOGRAPHY—always a ready source of valuable photographic information. Order several of these POPULAR PHOTOGRAPHY volume files today. They are $2.50 each, postpaid—3 for $7.00, or 6 for $13.00. Satisfaction guaranteed, or your money back. Order direct from:

JESSE JONES BOX CORP., DEPT. PP
Box 5120, Philadelphia 41, Pa.
(Established 1843)

8/8 mm SAVE MONEY & TIME 16 mm

with SUPERIOR Movie-Making Bargains

TELEPHOTO COATED LENS
8/8mm 1½" Regular Value $11.95
With Coupon Below Only $5.88

This powerful lens with 3X magnification is just what you need to bring distant objects up close. Ideal for wild life and vacation movies. Order with coupon below only $5.88. Postage extra. *Satisfaction guaranteed.*

AMAZING VALUE IN FILM

25' 8/8mm....**$1.49** 100' 16mm.....**$3.00**
4 for..... 5.00 3 for..... 8.50
50' 16mm mag.**$1.95**
3 for..... 5.50

Postage extra. Orders filled same day.

ORDER NOW. SATISFACTION GUARANTEED

NEW 52-PAGE CATALOG
has hundreds of money-saving bargains in 8/8mm and 16mm movie film, home processing equipment, lenses, light meters, filters, tripods, splicers, editors, screens and other supplies. These Superior values can cut your movie-making costs in HALF.

SUPERIOR BULK FILM COMPANY
Dept. 9-P, 442-450 No. Wells St., Chicago 10, Ill.

☐ Enclosed find $5.88 plus postage for which send 8/8mm 1½" Telephoto Lens.
☐ Enclosed find $..... for which send ASA 40 film.
....rolls of 8/8mm....rolls of 16mm
....16mm magazines.
☐ Send your FREE 52-page catalog of movie-making bargains.

Name.....
Address.....
City.....Zone....State.....

CENTURY 385-mm *f*/4.5 telephoto lens is announced by Century Photo Equipment Co., 10427 Burbank Blvd., N. Hollywood, Calif. In a focusing mount for Exakta, Leica, and Pentacon cameras, price is $179.50; for Rectaflex and Alpa cameras, $189.50; for Leica, Contax IIA, or Nikon, $279, including a mirror-reflex housing. Price includes tripod bracket and lens carries a three-year guarantee. More information available.

FEDERAL RANGEFINDER is used with long-focus lenses not having a reflex housing. Focusing range is from 13 to 250 yards. Price is $9.95. A telescopic magnifier which clips onto the rangefinder eyepiece but which also doubles as a telescope is priced at $3.95. Leather holster case holding both rangefinder and eyepiece is priced at $4.95. The trio is available as a unit for $17.85. Additional information from Federal Instrument Co., 12-10 Broadway, Long Island City, N. Y.

E. LEITZ, INC., 468 Fourth Ave., New York City, announces an eyepiece device for converting screw-mount lenses into telescopes. Screwed onto the base of a 50-mm lens, it will give a 3½x upright image, and a 6x image with a 90-mm lens. The price is $4.80 from Leica dealers.

ENTECO 8X, a neutral density filter for use with Enteco and Kodak lens attachments makes picture taking possible in bright sunlight, using high-speed films and lens and shutter adjustments found on most cameras. An exposure increase of three stops is required. Prices range from $3.50 (21.5-mm size) to $9.50 (Ser. IX). Manufacturer is Enteco Industries, 610 Kosciusko St., Brooklyn 21, N. Y.

ZOOMAR CORP., 55 Sea Cliff Ave., Glen Cove, L. I., N. Y., announces a 500-mm Zoomar-Reflectar *f*/5.6 lens for still and movie cameras. On Leica-type and Contax cameras, a mirror-reflex housing is needed, but this is unnecessary on 35-mm single-lens reflexes. Price is $485. A gun-stock and lens mount are available for 16- and 35-mm movie and the Hasselblad cameras. More information from Zoomar.

PROJECTION & VIEWING EQUIPMENT

TDC TABLE VIEWER projects a stereo still picture on an 8x10 screen. Similar in appearance and design to the TDC Stereo Project-Or-View, this blower-cooled unit does not contain a converter for large screen projection nor does it accommodate 2x2 two-dimension slides. The viewer takes any ASA 1⅝x 4 in. stereo mounts of glass, metal, cardboard, or lightweight plastic. Twin 200-watt lamps are supplied but 300-watt lamps may be substituted. Lenses are twin 3-in. *f*/2.8 and the price is $119.50. Accessories available are: carrying case with space for a slide changer, $20; Selectron automatic changer tray holding up to 30 slides, $19.50; and a tray-carrying case. Information available from TDC div. of Bell & Howell, 7100 McCormick Rd., Chicago 45.

AMERICAN OPTICAL CO., 80 Heard St., Chelsea 50, Mass., announces the availability (from camera dealers) of a booklet entitled **How to Select a Slide Projector;** for prospective projector buyers.

ROLL-A-LOCK JR. is the name given to two rolling tables, introduced by Commercial Picture Equipt., Inc., 1802 W. Columbia Ave., Chicago 26. A projector table (29¼x 16½x38½-in.) features two plastic-finished steel shelves bolted to steel-tubing legs; rubber casters, two with automatic locks for stability. Price, from audio-visual dealers, is $22.50; three-shelf model, $26.50. A

Don't Miss These Buys! FREESTYLE Prices Are Cut To The Bone!

HI-SPEED Kodak Daylight EKTACHROME New Low Prices!

35mm x 20 exp. Aero Ektachrome, ASA 100. ★ Free Processing Included
120 & 620 Aero Ektachrome Day, Weston 32. ★ Free Processing Included
} 3 Rolls $4.95

DAYLIGHT, EKTACHROME IN BULK (No Processing)
27½' Roll $3.95 37½' Roll $4.95 75' Roll $8.95
(Shp. wgt.—27½' or 37½'—8 oz.; 75'—1 lb.)
5½" x 40' roll. (Shp. wgt.—3 lbs.).....$5.50
Ektachrome Kits (1½ Gal. Developing Kit.....$2.50
For home processing (4½ Gal. Developing Kit.....3.95
(Shp. wgt. 1½ gal.—5 lbs. 4½ gal.—12 lbs.)
FREE BONUS! With any order of this bulk color film you receive free filter. Please specify filter size.

VARIGAM
DuPont's Most Popular Paper
10x10 Enlarging Paper Single Weight, S.M.
100 sheets.....$2.98
250 sheets.....$7.00
(100 sheets—4 lbs.)
(250 sheets—9 lbs.)

ANSCO
Daylight Color Type 535
Perfect results Guaranteed.
35mm x 27½'
$4.95
50'—$8.95
100'—$16.95
(27½'—6 oz.
50' & 100'—1 lb.)

35mm x 100' ROLL....$2.25 ea.
Save Even More! 3 Rolls—$5.50
FRESH SAFETY • PLUS X • SUPER XX • INFRA-RED • ANSCO SUPREME • BACKGROUND X
(Shp. wgt.—1 lb. per roll)

FRESH KODAK TRI-X FILM
The new Hi-Speed ASA 200—800 Film Everyone Wants. Dated 1956.
35mm x 100'..... **$3.95**
(Shp. wgt.—1 lb. per 100')

35mm Bulk Film Loader, plus 12 empty E. K. cartridges $5.50. With 100' Roll Dupont No. 2 (ASA 50) $6.50
(Shp. wgt. 2 lbs.)

MORE MONEY SAVING 35mm FILM!
35mm x 400 ft. roll Super XX.....$4.95
E. K. Fine Grain Positive '55 Date. Make your own B-W transparencies! 100' roll $1.49.....3 rolls $4.00
(Shp. wgts.—100 ft. roll 1 lb. each, 400 ft. 3 lbs.)

16mm KODACHROME
16mm x 100' Daylight Roll. Perfect Quality. We scooped the field on this terrific value! FREE Kodak Processing.
1 Roll (1 lb.) **$6.95** 3 Rolls (2 lbs.) **$20.00**

16mm x 100' KODAK SUPER X MOVIE FILM ... FREE PROCESSING INCLUDED.....each **$2.98**
NEW LOW PRICE! 4 for **$9.95**
(Shpg. wgt.—1 lb. each)
Above Film Without Processing—$1.19 ea.; 6—$5.98

√ √ 16mm x 50' Super X √ √
12 rolls—$4.95 28 roll can—$6.95. 2 cans—$17.00
(12 rolls 2 lbs.—4 can 5 lbs.)
Empty Magazines. 99¢ ea.....12 for $6.00
(1 lb. ea. 12—7 lbs.)
E. K. SUPER X 16mm x 50' MAGS. Free Processing. (Wgt. 1 lb. each).....$2.39 each; 3 for $4.50

CUT FILM AND FILM PACKS
2¼ x 3¼ Plus X and Super XX Film Packs—89¢ ea. 5—$3.95; 10—$7.50
(Shp. wgt.—6 oz. ea.)

4x5 Cut Film—Ansco Triple S Pan (ASA 200), Ansco Isopan (ASA 50), and EK. Ortho X (ASA 125).
New Low Prices!
3—25 sheet boxes $3.50; 6 boxes $6.98
(3 boxes 2 lbs.—6 boxes 4 lbs.)
★ 4 x 5 Ansco Color — Indoor — 12 sheets.....$2.79
24 sheets.....5.00
FREE! Daylight Conversion Filter with above purchase.
8 x 10 Ansco Color—Daylight or Tungsten—
(Shp. wgt.—2 lbs.) 10 sheets pkg. $5.98

ENLARGING PAPER
Haloid 10" x 10" Double Weight, No. 4, 100 sheet package.....$3.95 ea.; 2—$7.50
(Shp. wgt.—5 lbs. ea.)
8 x 10 E. K. Kodabromide Single Wgt., Glossy
F3—100 sheets. $2.98 300 sheets. $7.95
F4—100 sheets. $1.98 500 sheets. $4.98
(4 lbs. and 10 lbs.)
10 x 10 S. W. Glossy, CONTRAST 2—Excellent Quality. (5 lbs.) 100 sheet box.....$2.98
7x8 ⅝ EK. Royal Bromide F2 SW Glossy 100 sheet box.....$1.79; 3 boxes $5.00
(Shp. wgt.—3 lbs. and 8 lbs.)

AERIAL FILM Cut Your Own Sheet Film For Pennies!
5½" x 50' E. K. Tri X (Weston 200).....ea. $1.95
(Shp. wgt. 3 lbs. ea., 3—8 lbs.).....3 for $5.50
5½" x 75' E. K. Infra-Red (6 lbs.).....1.95
5½" x 200' E. K. Super XX (10 lbs.).....7.50
5½" x 200' E. K. Tri X '54 date.....10.95
(Quantity Prices on Request)
Be sure to include postage. All C.O.D.'s 30% DEPOSIT. Items not marked fresh are past date but fully guaranteed.

Export and wholesale inquiries invited. Minimum order $3.00. California residents include 3% sales tax.

FREESTYLE SALES CO.
1427 N. Western Ave. Hollywood 27, Calif.

America's most versatile...

ARROW-VIEW

Transparency Viewer

AMERICA'S HANDIEST

Self Illuminating BATTERY VIEWER

- Modern in design ... color ... styling
- Equipped with LARGEST TELESCOPING LENS in a hand held self illuminating viewer
- Viewing Slot accommodates All 2x2 (35 mm) Slides
- Packaged in attractive 3-color box.

Adjustable Magnification

Easy Accessibility

$5.95

Complete with Batteries & Bulb

COMPACT-O-LITES

Folds In Half.

Priced from $6.75 to $17.95

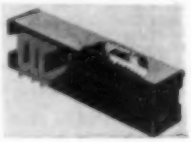
Send for Circular Describing Entire Line of Photo Products Manufactured.

ARROW METAL PRODUCTS CO.

108 N. JEFFERSON ST. CHICAGO, ILL.

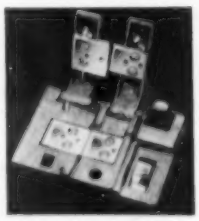
two-shelf table, similar to the above but for tape recorders, measures 29¼x16½x28-in. and is priced at $22; matching outlet box, $9.75. Both tables support up to 200 lb.

LA BELLE SALES CORP., Oconomowoc, Wisc., announces two new slide projectors, the Director 300 and Showman 300. Both models feature a finger-touch changer system which automatically feeds, projects, and restacks slides in proper sequence; 75- and 150-slide capacity holders (in glass or cardboard mounts intermixed); blower cooling; 300-watt illumination; color-corrected lenses; weight under 7½ lb. The Director, with an *f*/3.5 lens, is priced at $59.50; the *f*/4 Director is $49.50. More information available from La Belle.



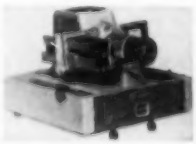
YANKEE SLIDE TRAYS are interchangeable, hold 36 slides in any mount, and will fit TDC Selectron and Viewlex Change-O-Matic slide changers. One model features a spring-type slide retainer which prevents the slides from falling out. A pressure-sensitive index label, recessed in the tray top, provides space for 36 titles. Boxed in pairs (box serves as a file case) price is $2.85. Standard models (without slide retainer) are priced at $1.85 per pair. More information available from Yankee Photo Prods., 3325 Union Pacific Ave., Los Angeles 25.

KODAK READY-MOUNTS for home mounting of transparencies are now available in packages of 100 and contain a film-cutting guide. Edges are sealed with a household iron. The price is $1.25, for either 35-mm or 828 roll-film-size transparencies.



FILM SPLICER is announced by Commercial Picture Equipt., Inc., 1802 W. Columbia Ave., Chicago 26. One motion of the tension-held splicing arms cuts and splices the film. A jeweled scraper is adjusted to scrape only the emulsion and not the film and sprocket guides are located so that color and black-and-white films can be spliced without crossing, regardless of direction of travel. Price is $36.

FLASH-A-FILM is a combination hand-viewer and filmstrip projector which can also be used for film editing. Slipping the unit over a flashlight converts it to a wall or screen projector. Price is $2.98 ppd., including a 100-frame film story. Manufacturer is The McArthur Co., 5882 Hollywood Blvd., Hollywood 28, Calif.



TDC HEADLINER 303 is a 300-watt tray-loading slide projector, permanently mounted in a sturdy carrying case accommodating eight extra Selectrays. Other features are a four-in. *f*/3.5 lens and a four-inch blower for cooling. Manufactured by Bell & Howell, 7100 McCormick Rd., Chicago 45, the price is $54.50, incl. case, Semimatic changer, and one Selectray.

SAFE-LOCK PROJECTO-O-STAND Model 205, for movie and still projectors, has a

SOUTH AMERICA "THRU THE LENS" TOURS

It's a Travelworld Thru The Lens Tour—and it's the photographic opportunity of a lifetime! In Panama, Equador, Peru, Chile, Argentina, Uruguay, Paraguay and Brazil spectacular scenery and incredibly colorful "human interest" await the cameras of fifteen fortunate American shutter-bugs who will participate in the most interesting South American tour ever offered.

Departure October 7. For detailed information and free tour folder write:

Travelworld, Inc.

THRU THE LENS TOURS

5814 Wilshire Blvd., Los Angeles 36, Calif.

Eric Ergenbright, Manager

BASS SAYS: Let the OLD HORSE TRADER make you the best deal on your old pet camera!

QUALITY CAMERAS SINCE 1910

Bass Camera Co

179 W. MADISON ST. CHICAGO 2, ILL.

STUDY PHOTOGRAPHY

COMMERCIAL • PORTRAIT • ILLUSTRATIVE

Finest professional instruction and equipment. Training under G.I. Bill SSO. Living accommodations secured for men. Attractive residence for girls. Enter Sept. 7 or Oct. 3. WRITE REGISTRAR, ROOM 149, 750 NORTH MICHIGAN AVENUE, CHICAGO 11, ILL.

RAY-VOGUE

CREATIVE PHOTOGRAPHY

Not a "school." A different KIND of teaching—"well known for....students....becoming famous professionals and amateurs." 36th year. Write for booklet P-14.

RABINOVITCH PHOTOGRAPHY WORKSHOP

40 W. 56 New York 19

Learn PHOTOGRAPHY at Home

Splendid Hobby or Vocation

Prepare in spare time. Practical basic training. Long-established school. Send for free booklet, "Opportunities in Modern Photography" and particulars. Sent postage prepaid. No obligation.

AMERICAN SCHOOL OF PHOTOGRAPHY

835 DIVERSEY PARKWAY, Dept. 2365, CHICAGO 14, ILLINOIS

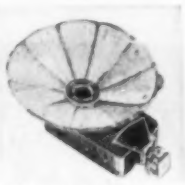
tripod base and is in operating order in 10 seconds. Table-top section tilts from a vertical storage position to a horizontal position and locks by means of a lever. Distance from floor to table surface is 37 in., weight is five lb. Manufactured by Arsco American, Inc., 3308 Edson Ave., New York 69, the price is $16.95.

FLASH

LUMAX 110 AGM is an a-c electronic flash unit weighing ¾ lb. Flash duration is 1/1000 sec, recycling time three to four sec; guide numbers are 30-35 for color and 190 for black-and-white films. A modeling light is built into the reflector. Price is $39.95 and more information is available from Lumax Mfg. Co., 489 Sixth Ave., New York 11.

OMEGA 120 Camera Universal Flash Bracket (C113) is announced by Simmon Bros., Inc., 20-28 Starr Ave., Long Island City 1, N. Y. It positions the flash unit on the right side of the camera lens and slightly forward of the focusing knob. Price is $6.50. An additional adapter (C114) for Graflex-type flash units is priced at $1.50.

WALZ FANFOLD flashgun swivels in 360 degrees; has an extension flash outlet; built-in bulb ejector and circuit tester; operates on A.A. batteries or B-C; clips onto camera accessory shoe. Distributed by U. S. Photo Supply Co., 1204 G St. N.W., Washington 5, D. C., the price is $12.95, including case, B-C unit, and cord. Special brackets available for cameras not equipped with an accessory shoe.



BB-409 is a power supply for Series 200 Ascorlight speedlights. Operation is continuous on 110-volts a-c, 60 cycles, and recycling time is three seconds. American Speedlight Corp., 63-01 Metropolitan Ave., Middle Village 79, L. I., N. Y., announces the price at $54.

GENERAL ELECTRIC, Nela Park, Cleveland 12, Ohio, announces price reductions on four flashbulbs: New prices are M-2, 9 cents each; No. 5, 12 cents; No. 5B, 15 cents; and No. 8, 11 cents. An adapter is given free with each purchase of 12 M-2 flashbulbs.

ASCOR SUPER SUNLIGHT Power Supply A-805 is announced by American Speedlight Corp., 63-01 Metropolitan Ave., Middle Village 79, L. I., N. Y. Speedlights of as much as 10,000 watt seconds can be recharged in six seconds without requiring additional heavy-duty power lines. Price is $2,900 and additional information is available.

AMERICAN SPEEDLIGHT CORP., 63-01 Metropolitan Ave., Middle Village 79, L. I., N. Y., announces a line of lightweight, portable speedlights. Ascorlight 201 provides 2200 beam candle power seconds; 1/1300 sec flash duration; four sec recycling; guide numbers of 220 for black-and-white, 45 for Kodachrome, and 65 for Ektachrome films. Price is $89.50 less battery. Ascorlight 202, is similar but operates on 110-v 60 cycle a-c. Price is $109.50. Ascorlight 203, designed for press photography, features a B-C circuit for off-the-camera flash without the use of long synchronization cords. Over 40 accessories including nickel-cadmium batteries and interchangeable reflectors are available.

SOUND PROJECTION EQUIPMENT

DAYSTROM 404 is a magnetic-tape recorder-preamplifier which will record and play back through audio amplifiers and speaker systems. Incorporating features of its predecessor Model 401, it is claimed to have a "silky-smooth" belt drive; vibrationless motor mounts; a response of 30 to 15,000 cycles at 7½ ips; push-pull speed changer providing instan-

PARENTS ACCLAIM
It's Educational
It's Entertaining
It's Inexpensive

"living library"

STARTER SET
1 Viewer and 1 Book
$2.95

"Living Picture Books"
$1.00 each

consists of
The Living Library Viewer is sturdily constructed . . . easy to operate . . . appeals to kids from 6 to 60! "Storybook" magazines are quickly interchanged. 36 fascinating titles to choose from!

WALT DISNEY

Living Desert	Donald Duck in	6 WESTERNS
Beaver Valley	Old Sequoia	6 SCENICS
Cinderella	Donald Duck's Garden	6 ADVENTURES
Snow White	Mickey's Birthday Party	6 TRAVELS
Alice in Wonderland	The Nifty Nineties	
Pinocchio	Pluto at the Zoo	
	Chip'N'dale	

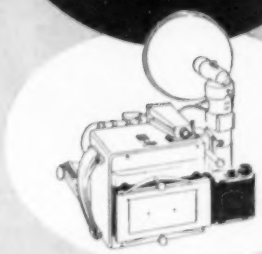
"Living Library" is on display and for sale at all leading photographic and department stores or write for name of dealer nearest you.

Attention 8mm Fans
MELTON POCKET MOVIE VIEWER
Views any 50-ft. 8mm film without screen or projector
$4.95
at photographic stores

MELTON INDUSTRIES
211 ARENA STREET
EL SEGUNDO, CALIFORNIA

DEALERS! Write for complete information and nearest distributor

use ROLL FILM in your PRESS CAMERA



ADAPT•A•ROLL 620
for the most versatile camera you've ever owned

No changes necessary. Slides in and out like cut film holders and fits all 2¼x3¼, 3¼x4, and 4x5 spring back press cameras. Use any 620 roll film either color or black and white.

Now, get more out of your camera. Use it for everything from snapshots to studio color work with the Adapt-A-Roll 620 roll film adapter. $29.95. Fully guaranteed.

SEE IT NOW AT YOUR DEALER.

TA-MAR INC. | 11571 Jefferson Blvd. Culver City, Calif.

ENLARGING can be an EXACT SCIENCE... when you do it Spot-O-Matically

Tells you accurately
1. Contrast grade of paper
2. Exposure time
3. Whether negative is over or under developed

No enlarging method yet devised is so ACCURATE, SO "BONER-PROOF," and yet so amazingly SIMPLE! Faster, better than test strips.

FOR COLOR OR BLACK AND WHITE

110-125 Volts AC-DC

KINNARD CO.
324 W. Vine Street
Milwaukee 12, Wis.

$12.50
with 48-page manual, 6-ft. cord, paper speed chart.

Announcing . . .

This Month's New MODERN CAMERA GUIDES

UNDERWATER PHOTOGRAPHY

by Rebikoff & Cherney

For the thousands of skindiving and underwater spearfishing fans here is a new guide to submarine photography and movie making. $1.95

RETOUCHING NEGATIVES AND PRINTS

by Kitty West

A clear, simple step-by-step method of overcoming negative and print faults using the latest techniques. $1.95

NEW titles, new ideas, up-to-the-minute revisions — that's why this popular, fast-growing series has sold more than *700,000 Modern Camera Guides* to date! Each guide is 128 pages, illustrated in black-and-white and color, printed on slick paper. *Which new and current guides do YOU need?*

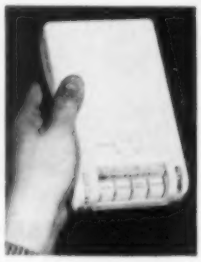
Argus
Beginner's Guide To Color Photography
Bolex Movie
Bolsey
Canon
Exakta
Exposure Meter
Ikoflex
Keystone Movie
Kodak (Miniature)
Leica
Medical and Dental
Omega Enlarger
Photo Darkroom
Photographing Your Flowers
Revere "33" Stereo
Rolleiflex
Speed Graphic
Stereo-Realist
3 Dimensional Projection
Twin Lens Reflex
Voigtlander
Zeiss Ikon

At all camera stores

$1.95 each

GREENBERG: PUBLISHER
201 East 57th St., New York 22

taneous selection of 7½- or 3 3.4-ips tape speeds; preamplifier holds distortion to less than 2 percent; signal to noise ratio 40 db or better. Price is $229.50. A companion amplifier and speaker (Model 402) in a matched carrying case is available for $100. Manufacturer is Daystrom Elec. Corp., Poughkeepsie, N. Y.



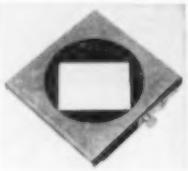
MINIFON P55 is a pocket-sized, battery-operated recorder. Push-button controls provide instantaneous action for recording, stopping, rewinding, and playback; erasing by re-recording and rewinding. Microphone is effective up to twenty feet away. Speeches of up to five hours and music of up to 2½ hours (on finer high-fidelity speed) are made on a reel of wire light enough to be mailed for three cents postage. Other features are a dictation footage clock; playback through stetoset earphones, radio, TV set, or any amplifier. Price, $289.50, includes earphones, ½-hr reel of wire, and batteries. Accessories available include a combination speaker-microphone for recording and playback and a wristwatch microphone. Full information available from Geiss-America, Chicago 45.

DARKROOM EQUIPMENT

FORCED DEVELOPMENT of Tri-X, Royal Pan, Du Pont Superior Press, and Ilford HP5 films is described in a free bulletin issued by Edwal Scientific Prod. Corp., 420 W. 111th St., Chicago 28.

FOTOFADE, product of Kalart Co. of Plainville, Conn., is now offered in plastic vials of sufficient quantity to make eight oz of working solution. Complete instructions for use are included and price is 85 cents. The product is a chemical dye that makes permanent fades and wipes on processed movie film.

ROWI UNIVERSAL, a four-legged table or clamping tripod, can be arranged in a variety of positions with accessory parts. A ball-and-socket head accommodates all cameras and can be rotated in any direction. Leg tubes are nickeled brass. For more information, write Willoughbys, 110 W. 32nd St., New York 1, N. Y. Price is $18.95.



DISTORTION CORRECTION attachment for Series B and D Omega enlargers enables the user to tilt and rotate the negative as needed to correct linear distortion without changing the basic alignment of the enlarger. Simmon Bros., Inc., 30-28 Starr Ave., Long Island City 1, N. Y., announces the price at Omega dealers at $27.50 (slightly higher in West).

SIMMON BROS., INC., 30-28 Starr Ave., Long Island City 1, N. Y., has resumed production of an enlarger for 35-mm and smaller negatives, down to Minox size. Known as the Omega A-2, it comes in two sizes. The Portable A-2 which can be disassembled and fitted into an accessory carry case allows magnification from two to nine times on the baseboard, for prints up to 8x10; the Professional A-2 is taller and makes prints from 2x to 12x magnification on the baseboard, for prints up to 11x14. Giant prints are obtainable by rotating enlarger 180 degrees and projecting on the floor. Both enlargers are of condenser-type design with built-in color heads for color filters and provide for interchangeable lenses. A complete line of filmholders (for various negative and transparency sizes) and other accessories are available. Prices are, respectively, $87.50 and $92.50. Complete information available.

GERMAIN

PORTRAIT
COMMERCIAL
COLOR
CAREER
CAMERA REPAIR

For 37 years—Germain has professionally trained men and women for successful careers in photography.

PHOTOGRAPHY

Free Placement; Housing; Vet Approved; Lic. N. Y. Dept. of Ed. Write for FREE Bklt. No. 7.

GERMAIN School of Photography
225 Broadway, New York 7, New York

PROGRESSIVE SCHOOL OF PHOTOGRAPHY
NEW HAVEN • CONNECTICUT
A DIVISION OF GERMAIN

FOR YOUR FINEST PRINTS

CESCO TRAYS
PORCELAIN ENAMELED STEEL

CLEAN · WHITE · SMOOTH
COLUMBIAN ENAMELING & STAMPING CO., Inc. • Terre Haute, Ind.

CA$H FOR YOUR CAMERA!

Write today, giving full details about your camera and get our premium cash offer or trade-in allowance. Ask for literature on the camera you want . . . *we Buy, Sell and Trade Cameras.*

ALFRED BASS INC.
585 MARKET ST.,
SAN FRANCISCO • YU. 6-0583

YOU HAVE READ ABOUT IT—NOW SEE IT
HAWAII'S 1955 VOLCANIC ERUPTION
SPECTACULAR • featuring FULL COLOR
3-DIMENSION
REALIST SIZE STEREO SLIDES
• Also 35mm Color Slides and 8mm & 16mm Movies
A most amazing photographic record of the most sensational eruption in Hawaiian history. Write now for free descriptive brochure. Also stereo realist kodachrome originals of scenic Hawaii.
HAWAIIAN STEREOS
P.O. Box 2874 HONOLULU, HAWAII

SAVE MONEY! FREE BARGAIN LIST

CENTRAL CAMERA CO. PHOTOGRAPHIC HEADQUARTERS SINCE 1899
Save money on all photographic equipment. Send for Central Camera Co. FREE Photographic Bargain List today.
CENTRAL CAMERA CO.
Dept. P-9 230 S. Wabash Chicago 4, Ill.

Learn PHOTO COLORING At Home!

EASY TO LEARN. Supplement present income by doing this profitable creative home work for studios, stores, and others. Full or part time. Fascinating hobby or vocation. Old established school. Low tuition. Easy payments. Write today for FREE BOOKLET. It tells all about getting started. No obligation.
NATIONAL PHOTO COLORING SCHOOL
835 Diversey Pkwy., Dept. 2266, Chicago 14.

FILM

ASA FILM SPEED VALUES booklet is available in a new edition covering all popular black-and-white and color films available in the U. S. Measuring 2½x4 in., it slips easily into a pocket or camera bag. A conversion table to Din, Weston, and Scheiner values is provided. This booklet is free at all Zeiss Ikon dealers or direct from Carl Zeiss, Inc., 485 Fifth Ave., New York 17.

TRI-X rollfilm is now available in roll-film size 127 and priced at 50 cents a roll. Eastman Kodak Co., Rochester 4, N. Y., has now completed the variety of sizes in which this film is offered.

ADOX FILM (See POPULAR PHOTOGRAPHY May, 1955 pg. 58), recently introduced in 35-mm film size by E. Leitz, Inc., 468 Fourth Ave., New York 11, is now available in roll film, size 120. Known as R-14, R-17, and R-21, ASA exposure indexes are, respectively, 16, 32, and 80. Price is 60 cents per roll.

KODAK PLUS-X FILM price has been reduced, as announced by Eastman Kodak Co. 120 and 620 now cost 45 cents per roll and price of the two-roll Duo-Pak is now 85 cents.

VITACOLOR is a new still and movie color film available in 35-, 16-, and 8-mm sizes. Manufactured by Vitacolor Labs., Albion, N. Y., it is claimed to have a remarkably fine grain, especially desirous in the 8-mm size. ASA exposure index of the outdoor-type film is 10. Also available in indoor type, sizes and prices (processing included) are, 35-mm (12 exp.) $1.89, (20 exp.) $2.25, (36 exp.) $3.25; 8-mm (25 ft, dbl. roll) $2.95; 16-mm (100 ft) $9.95. Film carton doubles as mailing container.

EASTMAN KODAK CO., Rochester 4, N. Y., announces the availability of a 12-page catalog describing the complete line of Kodak professional black-and-white films, plates, and papers. It may be obtained direct or picked up at any Kodak dealer's.

MINOX dealers now carry Kodak Tri-X film in cartridges fitting the Minox miniature camera. Two cartridges of 36-exposures are priced at $2.50, including an exposure guide. Distributor is Kling Photo Corp., 235 Fourth Ave., New York 3.

PROCESSING SERVICE

FILM WIZARD has expanded its service to users of 8-mm Kodachrome movie film with a custom titling service at 50 cents per title, a Custom DeLuxe pictorial titling service, and slide copying on film. Also offered are single-frame enlargements, editing services, and a booklet on profitable uses with an 8-mm camera. Information available from Film Wizard, Box 38441, Hollywood 38, Calif.

LINEX COLOR PRINTS from Linex stereo slides can be ordered through any Linex dealer or by mailing the marked transparency to the Color Processing Lab., Box 267, Rockville Center, L. I., N. Y. The 2¼x2¼ and 3¼x3¼ prints are priced at 35 and 70 cents each, respectively.

EXHIBITION PRINT SERVICE is announced by Pavelle Laboratories, Inc., 16 East 42nd St., New York 17. This new department will prepare complete photographic exhibits at $4.25 per 11x14 print; toned, mounted, and matted. A special advisory service is available in the selection of material for such exhibits, at no extra charge.

STEREO COLOR PRINTS and viewer are announced by Pavelle Color Inc., 533 W. 57th St., New York 19, N. Y. Viewing size is 2¾x2⅛ in. Prints can be cut apart for framing. Stereo print pairs are priced at 79 cents each. The viewer alone is 79 cents, but only 12 cents when purchased with three or more 3-D prints.

BAHNSEN COLOR LABS., Box 241, 117 Glen St., Yellow Springs, Ohio, announces a complete processing service on Anscochrome and Ektachrome. Prices begin at $1.15 for 35-mm (20 exp.) unmounted, $1.25 mounted; for 120 and 620 rolls processing charge is $1.15. Write for price list of sheet-film processing and color prints.

SYNDICATE PHOTO LAB., announces its new address: 3 West 61st St., New York 23, N. Y. This service continues in making photo murals and enlargements to 16x20.

EKTACHROME PROCESSING is announced by Pace & Van Camp Color Labs., 480 Lexington Ave., New York 17, N. Y., who have extended their professional services to amateur photographers using any type of Ektachrome film. With 2-stop underexposed shots, normal results are claimed obtainable if exposure indexes are included

QUALITY COLOR PRINTS

24 HOUR SERVICE
2¼ x 3¼ 20c each

3¼x4 37c ea. | 4x5 45c ea. | 5x7 75c ea.

COLOR FILM DEVELOPING
620—120—35mm—ANSCO COLOR EKTACHROME—ANSCOCHROME per roll 75c

KODACOLOR PRINTS
3X ..... $0.27 ea.
5X ..... 1.25 ea.
8X ..... 3.25 ea.

Color Slide Duplicates
5 for $1.—12 for $2.

24 HOUR SERVICE
8 x 10 1.50 each

MODEL FILM LABORATORY DEPT. P 78 W. 47th St. New York 36, N. Y.

WESTERN UNDERSELLS THE DISCOUNT HOUSE!!
GUARANTEE . . . If not delighted with any purchase from Western, just pack it up and we will refund your money, plus transportation both ways.

10% DOWN! 30 Day Free Trial • 2 Year Guarantee • Highest Trade Ins • Old Equipment Can Be Used as Down Payment SAVE UP TO 50%

USE WESTERN'S TIME PAYMENT PLAN — SEND 10% WITH ORDER

DEMONSTRATORS — LIKE NEW CAMERAS — LENSES, PROJECTORS

35mm CAMERAS
Contax II f2 Sonnar $83.50
Contax IIA f2 Sonnar 165.00
Canon IVS2 f1.8 Serenar 143.00
Nikon f1.4 Nikkor 167.00
Praktica FX f2.8 ..... 42.00
Praktica FX f2 Biotar Preset 83.00
Auto Pentacon f2.8 Westanar Auto 118.00
Exakta VX f2.8 Tessar 149.00
Exakta VX f1.9 Xenon Auto 196.00
Exakta VX f2 Biotar Preset 158.50
Argus C3 Case & Flash 31.50
Argus C4 f2.8 ..... 46.00
Bolsey B2 f3.2 ..... 24.50
Kodak 35 RF f3.5 ..... 29.00
Retina IIA f2 Xenon 72.00
Signet f3.5 Ektar 44.00
Mercury II f2.7 Tricor 19.00
Voigt Vito II f3.5 NEW 45.50
Kodak Stereo f3.5 ..... 53.50
Stereo Realist f3.5 ..... 73.50

MOVIE EQUIPMENT
Kodak Brownie f2.7 ..... $22.00
Bolex H8 Leader f1.9 Turret 144.00
Revere 88 f2.5 ..... 32.00
Revere 80 f2.5 ..... 44.50
Revere 44 f1.9 Mag. Turret 93.50
Pathe Super 16 f1.9 Turret 225.00
Bolex H 16 Leader f1.9 Turret 148.50
B&H 253 Monterey 500W 55.00
DeJur 750W 84.00
Kodak Brownie 300W 39.00
Revere 85 500W 58.50
Revere 90 750W 67.00

SLIDE PROJECTORS
Argus PB 300 Case 27.00
Golde Manumatic 300W 26.50
TDC Mainliner 300W Semimatic 30.50
TDC Model D 300W Semimatic 36.50
Brumberger 300W Auto Changer 27.50

MISCELLANEOUS CAMERAS
Ricohflex VI f3.5 ..... $ 21.50
Rolleicord IV f3.5 Xenar MX 74.00
Auto Rollei f3.5 Xenar MX 118.00
Auto Rollei f3.5 Tessar MX 132.00
Kodak Medalist I f3.5 Ektar 56.00
Kodak Medalist II f3.5 Ektar 112.00
Polaroid Land 41.50
Polaroid Highlander 42.00
2¼x3¼ Ann. Graphic f4.5 R F 82.50
4x5 Ann. Graphic f4.5 R F 96.50

POPULAR LENSES & ACCESSORIES
28mm f3.5 Angenieux 74.00
35mm f2.5 Angenieux 57.00
35mm f3.5 Summaron 57.00
40mm f3.5 Casseron 31.00
58mm f2 Biotar Preset 64.00
135mm f4.5 Hektor 57.00
135mm f3.5 Nikkor 84.00
135mm f4 Sonnar 67.00
135mm f3.5 Tele Colinar Preset 42.00
Leitz Focaslide 22.50
Leitz B.C. Flashgun 17.50
Leitz Imarect Finder 23.00

NEW! NOT AERO EKTACHROME NEW!
35mm EKTACHROME!
35mm 20 Exp. — 1 Roll $1.49, 4 Rolls 5.49
36 EXP. — 1 Roll $2.25, 3 Rolls 6.29
Bulk Film* — 20 ft. 11.25, 100 ft. 37.50
FREE—10 CARTRIDGES, per ea. 25 ft. of Bulk

MIRACLE ANSCOCHROME* A.S.A. 32
Stops Fast Action! Accurate Color! Tremendous Depth of Field! Frame Numbered—Daylight or Tungsten
20 Exp.—1 Roll 1.37 —4 rolls 4.99
36 Exp.—1 Roll 2.10 —3 Rolls 5.49
Bulk Film 50 ft. 15.95—100 ft. 34.50
20 Free Carts. ea. 50 ft.

DEVELOP YOUR OWN EKTACHROME
Kit E1—Develops 6 rolls 120/620 ..... $1.05
Kit E-2—1 pt. develops 6 rolls, 20 exp. 35mm ..$1.80
Kit E2—½ gal. develops 24 rolls, 20 ex. 35mm ..$4.80

* Kodak's HI-SPEED TRI-X
A Miracle in Black & White
35mm 20 Exp. ..... 4 for 2.15 ..... 10 for 3.19
35mm 36 Exp. ..... 4 for 1.99 ..... 7 for 3.15
Bulk Film ..... 50 ft. 2.45 ..... 100 ft. 3.99

35mm SPECIAL SALE 35mm
FACTORY FRESH ANSCO 535
20 EXP.—1956 DATE—FRAME NUMBERED
4 Rolls $3.75—7 Rolls $5.99—10 Rolls $8.25
28 ft. ANSCO FACTORY SEALED CANS
Tongued, Frame-Numbered—1956 Date
1 Can $6.75—3 Cans $18.29—5 Cans $27.95
8 Free Cartridges & 8 Mailing Bags with ea. can

WE DO NOT SELL OUTDATED OR WAR SURPLUS FILM. ALL OUR FILM IS GUARANTEED FACTORY FRESH AND DIRECT FROM KODAK OR ANSCO. ENCLOSE 20c FOR POSTAGE. *RELOADS

LOWEST PRICE WEST OF THE ROCKIES!
World Famous EDIXA!
With Automatic Rapid Film Transport!

• Coupled Rangefinder
• Color Corrected f2.8 Lens
• Pronto Shutter to 1/200 sec.
• Built-in Flash Synch
• Self-Cocking Shutter
• Double Exposure Prevention
• Built-in Self-Timer
• Custom Finished, Black Morocco & Chrome

BRAND NEW $39.95 with Flash Gun

Blue Velvet Lined Cowhide Case Special $5.95

35mm KODACHROME
Sealed Factory Carts. 20 Exp.—1956 Dated
4 Rolls $7.39 | 7 Rolls $12.25

35mm BULK ANSCOCHROME
LOAD YOUR OWN! For Only $8.95 We Give You
• 35mm Daylight Bulk Film Loader
• 28 ft. 1956 Anscochrome (notched and numbered)
• 8 Cartridges and Mailing Bags
So Quick . . . So Easy . . . So Economical!

35mm BULK FILM LOADER

With 10 Empty cartridges $4.95
with 100 ft. fresh safety film
1956 Kodak Plus X or XX $ 8.39
with 28 ft. Ansco 535, 8 Free Carts $10.99
with 28 ft. New Ektachrome E2, 8 Free Carts. $15.49
with 100 ft. Kodak Tri-X, 10 Free Carts ..... $ 8.65
50 ft. Anscochrome, 18 Free Carts $20.50
100 ft. Anscochrome, 35 Free Carts, ... $38.95
100 ft. Kodachrome & 35 Free Carts $39.50

35mm EASTMAN KODAK 1956 Dated
Plus X or Plus XX—20 Exp. 6 for $1.79—10 for $2.75
Plus X or Plus XX—36 Exp. 4 for $1.97— 8 for $3.50
Bulk Film—100 ft.—Plus X or Plus XX . $3.75*

WESTERN PHOTO SALES BOX 46025, DEPT. P, COLE BR., HOLLYWOOD 46, CALIFORNIA

FACTORY-FRESH FILM VALUES

ANSCO COLOR DEV. KITS FOR HOME USE
New type for use with Ansco Color film and new ANSCO CHROME. 1 QT. SIZE.....98c 3 for 2.75
3½ Gal. Size..4.95

35mm x 20-EXP.—1956 DATED
ANSCO COLOR 3 Rolls
Reloaded from fresh bulk Day. or Tung. 3.35
6 for 6.00
FREE! 1 quart-size Developing Kit with every six!
35mm x 100' Tung.....13.95 (free Day. filter)

New High Speed, Finest Grain
NEW 1956 AERO EKTACHROME
120 and 620 Rolls (ASA40)
35mm/20-Exp. Rolls (ASA100 or ASA40)
Enjoy improved color balance, grain structure in results. 3 Rolls 4.95
1 Roll 1.75 6 for 9.50 12 for 18.75
Processing included (plus mtg. on 35mm). Add 5c per roll for postage.

35mm x 100' ROLL Plus-X, Super-XX, Ansco Supreme, Microfile or Background-X. Late date. Guaranteed quality. In metal daylight loading case. (Specify type film when ordering.) each 1.75
3 for 4.95

FACTORY FRESH 1956 DATED
35mm x 20-Exp. TRI-X 6 Rolls 2.49
reloaded from fresh bulk.

120-620 ROLL FILM Super-XX, 100 ASA or Triple-S Pan 10 for 2.49

MONTHLY SPECIALS

Enlarging Paper

	Each	3 for
8x10, SW, SM, #2, 3, 100's	1.75	4.95
5x7, DW, SM, #1, 2, 3, 4	.98	2.75
5x7, SW, GL, F1, 500's	3.75	10.75
8x10, DW, SM, #1, 2, 3, 100's	1.75	4.95
11x14, DW, SM, #1, 2, 3, 4, 50's	1.75	4.95

Contact Paper

4x5, SW, GL, Velox, F4, 500's	1.75	4.95
8x10, SW, SM, #2, 3, 4, 100's	.75	2.00
8½x11 Copy Reflex, 100's	.98	2.75

Cut Film

4x5 Ansco Color, 10's	1.75	4.95
4x5 Process Ortho, 25's	.75	2.00
4x5 Infra-Red, 25's	.75	2.00
5x7 Triple-S Ortho, 25's	1.49	4.00
8x10 Triple-S Ortho, 25's	2.49	7.00
11x14 Isopan, 12's	2.49	7.00

Send 25% dep. with order on C.O.D.s, balance on delivery. INCLUDE POSTAGE.

DELPRO SALES CO. (Dept. 9P) Smithtown, N. Y.

Specialists in TELEPHOTO LENSES

17" 432mm f5.6
Telephoto Lens—Brand New!
$239.50

$395.00 value!
The Most Powerful Telephoto Lens for Hasselblad!

A precision Daltmeyer true telephoto lens that covers sharply from corner to corner! Lightweight alloy focusing mount with tripod socket. Highly color-corrected. All optics coated. Perfect for nature and sports work. Sold Direct Only because of this low price! Deluxe Plush Lined Hard Carrying Case. $19.50.

12" 300mm f5.6
Telephoto Lens—Brand New!

$139.50
For All Standard 16mm Cameras
$249.50 value!

Precision American Made Tele-Athenar, especially designed for 16mm cameras. Guaranteed to have higher resolving power than any other 12" telephoto lens now on the market! Fully color-corrected. All optics coated. Very light weight, requires no support. In Black Mount with Chrome Trim. For Bolex, B&H, etc. Also in Kodak mount.

All-Lenses Brand New! 30 Day Trial Period! Full 5-Year Guarantee. Sent Postpaid. Full Refund If Not 100% Satisfied. Terms Available.

Write for literature on above lenses and information on our complete line of telephotos to fit all popular cameras. We supply professionals the world over.

CENTURY PHOTOGRAPHIC EQUIPMENT CO.
10427 Burbank Blvd., Dept. P-9, North Hollywood, Calif.

with film to be processed. With a 3½-stop correction, a color deficiency of about 35% occurs. Overexposed film may be reduced in processing as much as 1½ stops without loss of color balance. Price for 20-exp. 35-mm cartridge processing is $1.50, 36-exp., $2; plus three cents each for mounting, if desired.

COLOR CORP. OF AMERICA announces the opening of a branch office at 270 Park Ave., New York 17. Supplementing their main office in Florida, photographic color services (printing and processing) are now more easily available for amateur and professional photographers.

COLORFAX LABS., of Washington, D. C., has been appointed as an authorized color laboratory for the processing and printing of Ansco color films.

AUTHENTICOLOR, INC., 270 Park Ave., New York 17, announces a "fool-proof" control system of color sheet- and roll-film processing, by means of rigid electronic controls with an agitation system making use of an inert gas through all processing phases. Prices remain unchanged and additional information is available.

MISCELLANEOUS

JEN DIP for balancing daylight and indoor color films (when using flash) is available in a new packaging. A pliable plastic beaker holds the solution during the dipping process and eliminates the need for a funnel when returning excess solution to the bottle. New guide numbers include factors for the No. 5 SM and M-2 flash-bulbs. A 4-oz bottle (good for 400 dips) remains at $1.50. For a free guide chart, send a self-addressed, stamped envelope to Jen Products Sales Co., 421 W. 24th St., New York 36.

DUST-PROOF REEL CANS, designed to combat corroding effects of dust on films which may cause scratches or affect the tonal qualities of the film, are announced by Goldberg Bros, 1745 Wazee, Denver, Colo. Available in 8-mm sizes in capacities of 200, 300, and 400 ft prices are 55, 65, and 70 cents; 16-mm sizes range in capacity from 200 to 2000 ft and are priced at 55 cents to $4.75, respectively. Reels of equal capacity are equally priced.

SYLVANIA ELECTRIC PRODS. INC., Dept. JO, 1740 Broadway, New York 19, offers a loose-leaf binder-form manual covering the technical aspects and applications of the various types of lamps and lighting used in the photographic field. Data on color temperature, light output, recommended synchronization times, shutter speeds, and lumen seconds, are included. The price is $2 and manual holders will receive data sheets as new products are developed or existing specifications revised.

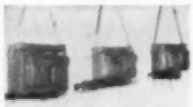
CLAYTON CHEMICAL and PACKAGING CO., 5420 N. Damen Ave., Chicago 25, announces a new 8-oz packaging of its concentrated P-20 and P-60 developers and CF-9 speed fixer. Prices are 49 cents each. The qt, gal, and 5-gal sizes remain available.

DIXIE AIR DRYER is a ⅛-hp hermetically sealed dehumidifier with a refrigerator-type compressor, claimed to dry air in a darkroom up to 25x48 ft with standard ceiling height. At 90 percent humidity, three gallons of water are removed from the air every 24 hours. Price is $69.50 and more information may be had from Adams Equipment Co., 614 S. Jackson St., Jackson, Mich.

WALZ filters in bayonet and screw mounts are coated, individually mounted, and can accommodate a screw-in lens hood. Available in Types A and F, Flash, Skylight, Yellow, Red, and Green, and prices range from $5.75 to $20.75. Color or black-and-white kits consisting of three filters in a carrying case range from $5.75 to $20.75. For complete price list, write to U. S. Photo Supply Co., 1204 G St. N.W., Washington 5, D. C.

TABLE-TOP TRIPOD, distributed by Douglas Homs Co., 165 O'Farrell St., San Francisco 2, Calif., features a built-in clamp for attachment to a table edge; three screw-on legs which extend unit to 19 in.; a universal swivel head covering 360 degrees; rubber-tipped legs and clamp; and weighs one lb. Price is $5.95.

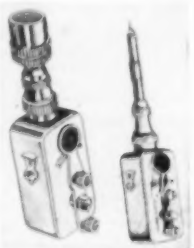
NEW YORK INSTITUTE OF PHOTOGRAPHY, 10 W. 33rd St., New York 1, offers a 40-page booklet entitled **Photography for a Profitable Career.** The school has enlarged to provide greater facilities for staff and students. Courses cover all phases of the photographic field.



ATTACHMENT STRAPS for tripods are now featured in the entire line of Pro and Camera bags made by J. B. Perrin & Co., 8476 Warner Dr., Culver City, Calif. The removable straps are located on the face of the Pro bags and are hinged with D rings at the rear bottom of the camera bags. Prices on the Perrin leather-bag line range from $10.95 to $49.95.

QUICK-SNAP camera-tripod coupler is announced by Hansen-Lonnes Co., 853 E. Hoyt Ave., St. Paul 3, Minn. One part is attached to the camera base and the other to the tripod head, providing instantaneous coupling or uncoupling of camera and tripod. Can also be used for flash and lighting equipment. Price, $5.95. Illustrated folder available.

MOVIE BAR LIGHTS employing two aircraft landing lights powered by small dry-cell batteries are announced by Natural Lighting Corp., 612 W. Elk Ave., Glendale 4, Calif. Pattern of light is same as movie-film frame size. Using fast pan film at sound speed, an exposure of f/22 at 35 ft is possible. Price is $42.50 less batteries and lamps. More information available.



WALZ SELF-TIMER attaches to any camera equipped with a cable release, permitting the photographer to get into the picture. Delays of up to ten seconds are provided. By making a simple adjustment, time exposures of up to three seconds are possible. Distributor is U. S. Photo. Supply Co., 1204 G St. N. W., Washington 5, D. C. Price is $2.95, incl. case.

PHOTOCARDS, a new type of business card made by a photographic process, features a picture of a product or an individual and is introduced by Berkey Photo Service, Inc., 77 East 13th St., New York 3. Price range is from $4.75 for 100 cards to $21.50 per 1000. Add $4 for first order only; setups kept on file for re-order.

LEICA CAMERA USERS with defective eyesight can have a test made at any Leica dealer, to show which correction lens is needed on the range-viewfinder window, for better picture-taking. When this is determined, a prescription obtained from an optometrist is taken to the dealer and the lens is ground by E. Leitz. Average cost is $12.

DEPTH VIEWERS, INC., P.O. Box 6, Cincinnati 36, Ohio, announces two models of viewing glasses for projected 3-D movies or stereo slides. With cardboard frames, prices are 10 cents per pair (M1-A) for adults and 8 cents per pair (M1-C) for children. Available from dealers, special prices are given in bulk quantities.—

THIS WALLET SIZE COLOR PRINT

from 35mm only **17½¢** minimum order 8 for 1.40

SPARKLING COLOR PRINTS

3¼ x 4	2½ X (2½ x 3¼)	5 x 7
3x 43¢ ea.	22¢ ea.	5x 85¢ ea.
Any 6—2.35	Any 9 for 1.89	Any 3—2.40

4 x 5	8 x 10
4x 50¢ ea.	8x 1.89 ea.
Any 4—1.85	Any 3—5.35

35mm COLOR SLIDE DUPLICATES

MOUNTED **17¢** ea.
6 for 1.00
20 for 3.00

UNMOUNTED **15¢** ea.
7 for 90c
20 for 2.50

COLOR DEVELOPING FOR THE PERFECTIONIST
Guaranteed 24 Hour Delivery

WE WILL DEVELOP YOUR ROLL OF COLOR FILM AND MAKE 20 2½ x 3½ COLOR PRINTS for 2.25

35mm DEVELOPING & MOUNTING

	1 Roll	2 Rolls	3 Rolls
Ansco (Any Type) & Ektachrome	1.00	1.85	2.65
120-620 Ansco or Ektachrome	1.00	1.75	2.50

REDUCED PRICES KODACOLOR PRINTS
3X (3½x3½) Now .29 ea.
5X (5x7) ... Now 1.35 ea.
8X (8x10) .. Now 3.25 ea.

WE WILL MAKE 2½ x 3½ PRINTS FROM YOUR 35mm COLOR FILM 20 COLOR PRINTS for 1.50

KODAK 1956 EKTACHROME RELOADS
35mm Daylight or Indoor
3 Times as Fast as Kodachrome (ASA32)
(Do Not Confuse with Aero Ektachrome)

Price Incl. Dev. & Mtg.

20 Exp.	36 Exp.
1 Roll $2.50	1 Roll $3.95
3 Rolls $6.95	3 Rolls $9.95

BUY OUR EKTACHROME WITH CONFIDENCE

Do not confuse this Ektachrome with outdated war surplus, Aero Ektachrome. This is fresh, 1956 dated, manufactured by Eastman Kodak and intended for amateur.

BULK 35mm ANSCOCHROME

Daylight Film Loader plus 28 ft. of Anscochrome tongued and frame numbered.
8 new, FREE Cartridges & 8 Mailing Bags.
Deluxe Developing and Mounting for 8 Rolls when sent in. All for $14.99.

SUPER-FAST ANSCOCHROME ASA 32

Superb true-color transparencies . . . possible even with your box camera in dim light. Try it now . . . we'll mail them to you in 24 hours. 35mm.

20 Exp.	36 Exp.
1 Roll $2.39	1 Roll $3.50
3 Rolls ... 6.39	3 Rolls ... 9.65

828: 1 Roll $1.75—3 Rolls $4.75
Prices include developing, mounting.
120 620: 1 Roll $1.95—3 Rolls $5.50
Incl. Processing *Reloads

(Please add 15¢ for postage and handling on all film orders)

ON ALL ORDERS OVER $15 WE SHIP VIA AIR INSURED, AND PAY POSTAGE

PANORAM FILM LABS 1190 6th Avenue, Dept 5, New York 36, N. Y.

FACTORY FRESH ANSCO COLOR 535

IF IT ISN'T CALLED ANSCO COLOR 535 THERE'S A REASON . . . AND THE REASON CAN'T BE GOOD! ANSCO COLOR 535 is the only emulsion made by the Ansco Co. fit for amateur use. All OTHER emulsions are stale Hollywood shortcuts and require special filters. DON'T TAKE CHANCES WITH YOUR PRECIOUS COLOR SHOTS!

SPECIAL SALE
1 Roll $1.89 5 Rolls $ 7.90
3 Rolls $4.89 7 Rolls $10.65
Price includes Developing & Mounting

28 ft. 35mm ANSCO COLOR—Sealed Cans 1956 Dated-Notched-Frame Numbered.
1 Roll $11.89 • 2 Rolls $22.75
3 Rolls $32.65
Prices include Developing and Mounting. 8 Free Cartridges & 8 mailing bags per can.

KODACHROME STEREO
20 EXPOSURES DAYLIGHT OR TYPE A*
3 ROLLS 9.75
5 ROLLS 14.95
Price Includes Developing and Stereo Mounting

35mm EKTACHROME BULK FILM

1956 Dated—Frame Numbered—E2
28 ft.—Price Includes Developing & Mtg. $16.50
100 ft. Sealed KODAK Cans with 35 free cartridges & mailing bags ..... $37.95 (No dev.)
28 ft. with 8 free cartridges & mailing bags. $11.50 (No dev.)

STEREO FANS
ANSCOCHROME STEREO

Take advantage of high speed Anscochrome. Get that elusive dim light shot. Use the new ASA 32 Anscochrome for stereo.

1 Roll 20 Stereo Exp. $3.50
3 Rolls for 9.75
Prices include 48 HR. developing and stereo mounting.

COLOR PRINTS

2x3¼	2½x3¼	3¼x4
20¢	25¢	44¢

STEREO MOUNTING 10 PAIRS $1.00

4x5	5x7	8x10
50¢	85¢	1.75

Color Developing
35mm Ansco Mtd. . 1.00
35mm Ektachrome Mounted 1.00
120—620 Ektachrome 1.00
FREE AIR DELIVERY ON ORDERS OVER $2.

Slide Duplicates 6 For 1.00

35MM 20 Exp. RELOADS
New Ektachrome (ASA 32) 4 for 6.75
Ansco Color 535 . . . 4 for 4.35
Kodak Miracle Tri-X . . . 10 for 3.50
Anscochrome ..... 4 for 5.25

SERVICEMENS COLOR PRINT CO.

From European Theatre
24 Hour Delivery
Send Work To:
East Coast Branch #1
78 West 47th Street
New York 36, N.Y.

From Pacific Theatre
48 Hour Delivery
Send Work To:
West Coast Branch #2
Box 46063 Cole Br.
Hollywood California

SHOOT ANSCOCHROME AT A.S.A. 125
WHEN YOU DEVELOP WITH OUR SPECIAL HIGH-SPEED KITS

4 Rolls 20 Exp. ANSCOCHROME
Developer for 4 Rolls
80 Cardboard Mounts
all for $8.75
8 Rolls 20 Exp. plus Developer & 160 Mounts $13.95

KODAK'S MIRACLE TRI-X

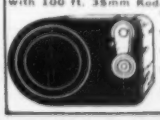
35mm 20 Exp.
6 Rolls $2.19
10 for $3.29
35mm 36 Exp.
4 Rolls $1.99
8 for $3.50
BULK TRI-X 50 ft. $2.45—100 ft. $3.95

35mm KODAK PLUS X OR SUPER XX

20 Exp.
6 for $1.79
10 for 2.69
15 for 3.97
36 Exp.
4 for $1.97
7 for 3.15
10 for 4.25
BULK X or XX 50 ft. $2.25—100 ft. $3.79

35mm BULK FILM LOADER

with 10 free cart. for each 28 ft. Color Film or with 100 ft. B&W Film $4.99
with 100 ft. 35mm Kodak Tri-X 6.49
with 100 ft. 35mm Kodak Plus X 6.25
with 28 ft. Ansco 535 Color 10.95
with 28 ft. Ektachrome 15.75
with 50 ft. Kodachrome 24.50
with 50 ft. Anscochrome 24.25



35mm ANSCOCHROME	35mm EKTACHROME
20 Exp.	20 Exp.
1 Roll $1.39	1 Roll $1.50
4 for 4.95	4 for 5.50
36 Exp.	36 Exp.
1 Roll $1.95	1 Roll $2.49
3 for 5.55	3 for 6.35
	NOT AERO EKTACHROME

35mm KODACHROME	BULK EKTACHROME
20 Exp. 1956—Factory Packed	Frame Numbered 28 ft. CAN
3 Rolls ..... $ 8.99	8 Free Carts . . $11.35
6 for 10.50	100 ft. CAN 35 Free Carts . . $37.95

MINIATURE FILM SUPPLY CO., Dept. P
78 W. 47th St. New York 36, N. Y.

35mm ANSCOCHROME
20 Exp. 1 Roll $2.29 3 for 6.29
36 Exp. 1 Roll $3.50 2 for 6.50
Prices Include Developing and Mounting

28 ft. 35mm ANSCO COLOR
1956 Factory Sealed Cans Notched & Frame Numbered
8 Free Carts. & 8 Mailing Bags $11.85
Price Includes Developing & Mounting As Ready

BULK EKTACHROME
35mm — 1956 — A.S.A. 32
8 Free Carts. & 8 Mailing Bags $16.25
Price Includes Dev. & Mtg.

28 ft. NEW ANSCOCHROME
with FREE BULK Film Loader, 8 Carts., 8 mailing bags includes Dev. & Mtg $14.95

SLIDE DUPLICATES
5 for $1
15 for $2.50

28 ft. 35mm KODACHROME
Frame Numbered-1956
8 free cassettes—8 mailing bags includes developing and mounting $18.95

KODACOLOR PRINTS
3X — 28c
5X — 1.29
8X — 3.29

GOLDEN GATE COLOR PRINTS

8x10—1.50 each

2 x 3¼	19¢ ea.—Any 6 for 1.15
2½ x 3¼	23¢ ea.—Any 6 for 1.35
3¼ x 4	43¢ ea.—Any 3 for 1.25
4 x 5	49¢ ea.—Any 2 for .90
5 x 7	90¢ ea.—Any 2 for 1.75

STEREO SPECIAL!

KODACHROME 20 EXP.—1956 Dated	ANSCOCHROME 20 EXP.—A.S.A. 32
3 Rolls ..... $ 9.99	1 Roll $3.49
6 Rolls 14.95	3 Rolls 9.99

PRICES INCLUDE DEVELOPING & MOUNTING.

COLOR DEVELOPING
35mm Mounted ANSCO $1 per Roll
3 for $2.75
EKTACHROME $1 per Roll
3 for $2.85
120/620 EKTACHROME or ANSCO $1 per Roll
4 for $3.35

WE WILL DEVELOP YOUR ROLL OF 20 EXP. COLOR FILM AND GIVE YOU 20 CONTACT COLOR PRINTS FOR — $2.15

35mm EKTACHROME LOW PRICES INCLUDE DEVELOPING & MOUNTING
20 Exp. 1 Roll $2.49 3 Rolls $6.99
36 Exp. 1 Roll $3.95 2 Rolls $7.50
NOT AERO EKTACHROME

120/620 ANSCOCHROME
1 Roll $1.89 — 4 Rolls $6.95
828 ANSCOCHROME
1 Roll $1.69 — 4 Rolls $6.49
Prices Include Dev. & Mtg.

35mm ANSCOCOLOR 535
1956 Frame Numbered*
Price Includes Dev. and Mtg.
3 Rolls $4.79 6 Rolls $9.00

35mm KODACHROME
20 EXP.—1956 Dated
ORIGINAL FACTORY PACKAGES
3 Rolls . . $5.49 6 Rolls . . $10.30

GOLDEN GATE COLOR PRINTS P. O. Box 46056 Cole Br. Hollywood 46, California • Dept. P

NEW! BIG 2½ INCH VIEW FINDER
FOR 35 mm. CAMERAS !!

If you have an accessory shoe on your miniature camera, you will want this wonderful NEW BIG 2½" VIEW-FINDER. NO MORE SQUINTING thru tiny aperture for locating subject or composing the real picture you want when ready to shoot.

YOUR CAMERA

IF YOU WEAR GLASSES, you will particularly want this new "EASY-SEE" view-finder—wonderful relief from the tiny aperture annoyance and confusion. Follow fast action easier and get the shots you really want. Better candid shots too. Fine high quality lens—carry in any pocket—slip in your camera accessory shoe in a second. Order now. No. 113m View-finder lens (2½") complete—$5.25 postpd.

GEEDEE PRODUCTS BOX 92, PAOLI, PA.

BE A CAMERA CRAFTSMAN...

Many are needed in this big paying field and now... YOU can learn to repair cameras using manufacturers' service methods at home... in your spare time! Instructions, tools, practice equipment—everything you need is included in this approved course!

SEND FOR FREE BOOK! Write for big FREE illustrated booklet that tells you HOW!

national camera repair school DEPT. Z-9 Washington 7, D.C.

When you order by mail . . .

please print your name and address clearly, be specific in your order, enclose proper amount, allow ample time for delivery.

Action

(*Continued from page 86*)

tion, 40 feet away, Newman created a delicate balance between the harsh overhead spotlighting and the general frontal illumination.

An added bonus was the framing of the subject by the graceful arc of the guide ropes in the background—a compositional element which the photographer frankly admits he never saw in the camera viewfinder, for the brilliance of the fill-in source was needed to bring it up to a level where it would record. The electronic flash had nothing whatever to do with stopping the subject's movement.

The exposure was based on Newman's experience shooting the 1954 circus in the same arena. Attempting to measure the brilliance of the prevailing light would have been futile, between the difficulties arising from the distance of his principal subject and the milling and pushing of the scores of accredited professional photographers who had been given the freedom of the circus during the opening performance. The fill-in device, however, was a technique that he had worked out in the intervening year.

Sports and action shooting has become as much of a specialty as any facet of Newman's short, active career as a working photographer. He recently completed a 5-month association with Macfadden's *Sports* magazine, following a free-lance stint during which his work was published in leading national weeklies, Sunday-magazine supplements, and monthly magazines for men. The black-and-white photograph reproduced on page 86 typifies his feeling of confidence in being able to capture action at the "perfect moment of suspense" without resorting to extremely fast shutter speeds. With hand-held Nikon equipped with a 135-mm Nikkor lens, he recorded the complex subject at *f*/3.5 and 1/100 second on Kodak Plux-X film, forcing the development in Promicrol. The performers are the Flying Palazzio's at the same circus as the color photograph on page 87.—▶

Sidewalk Studio

(*Continued from page 65*)

models and helpers to join me as enthusiastically as they do, no matter what their age. The spirit of the fun has the important effect on the all-important models; they're made to feel relaxed and at ease and that's what counts in the final result: the picture.

People are wonderful to photograph. You won't really know just how wonderful until you go out and try photographing them yourself. What are you waiting for?—▶

the photographic market place

8 X 10 COLOR PRINTS $2.00
All Orders Returned 1st Class
ANSCO COLOR & EKTACHROME ROLLS PROCESSED 120, 620, AND 35MM (Mfd.) $1.00. 35MM DUPLICATES, 20c EA
NO C.O.D.'S—MINIMUM ORDER $1.00
LO-PRICE COLOR PRINTS
2½x2½ ½ .30c 3x4½ 50c 4x5 75c 5x7 $1.25
5 x 5 .40c 8x10 $2.00
ACME COLOR PHOTO LAB.
Box 6025-C, Minneapolis, Minnesota

20 EXPOSURE 35MM. RELOADED CARTRIDGES 30¢
EASTMAN TRI-X
SUPER XX PLUS X DUPONT #2
20 Exp. Rolls..30c Ea. 36 Exp. Rolls..50c Ea.
Bulk $4.25 per 100 ft. — $2.25 per 50 ft.
ANSCO COLOR RELOADS
20 EXP. Daylight or Tungsten ASA 12..$1.25 Ea.
3 Rolls.....$3.50 28 ft. bulk.....$7.95
All fresh, clean safety film. Satisfaction guaranteed or money back. Please include 10c extra per order to cover postage and packing. No C.O.D.
EASTERN PHOTO LABS, Dept. "A"
1405 N. Charles St. Baltimore 1, Md.

Get Close to Your Model
● Get professional looking pictures. DeGroff AIR-WAY SHUTTER RELEASE solves your shutter tripping problems for color, portraits, children, pets, wild life, etc. Does away with clumsy, costly cable releases. Saves time, work and film. Trips shutter at any distance from 5 in. to 50 ft. or more! 12 different kinds.
Regular size ..... $6.00 Large size $9.00
Bulb 75c each Hose 10c per foot
See your dealer or write Fully guaranteed
DE GROFF LABORATORIES, INC.
South Bend 2, Indiana
YOUR CAMERA

TITLE SCENES WHILE SHOOTING
Optic "SCENE-TITLER" fits 8-16 mm. lens. Just write title on special glass & aim camera at light. No guessing about scenes! Guar.! Mail $4.95 to CINEMA SPECIALTIES, Dept. P, 5802 Hollywood Blvd., Hollywood 28, Calif.

Frame Numbered BULK & RELOADS 35MM FILM FACTORY FRESH!!
Not Gov. Surplus We do not substitute
E.K. PLUS-X or TRI-X RELOADS
20 Exp.....4 for $1.10—36 exp.....3 for $1.10
BULK 55 ft. $1.75 Plus 25c P.P. & H'dlg.
2—55 ft. $3 Plus 35c P.P. & H'dlg.
20 Exp. ANSCOCHROME (ASA-32) 3 for $4.00
20 Exp. EKTACHROME (ASA-32) 3 for $4.40
HOLLYWOOD NEGATIVE SERVICE
Box 789-P Hollywood 28, California

COLOR PRINTS From Your Color Films 25¢ 2¼ x 3¼
KODACHROME - ANSCOCHROME
EKTACHROME - ANSCO COLOR
4 x 5 50c | 5 x 7 $1.00 | 8 x 10 $2.00
DUPLICATE 35 mm slides, 25c
Film Processing: Anscochrome, Ektachrome 35 mm, 20 exp., mtd.; 120-620; $1 per roll
Fast Service • High Quality • Money Back Guarantee
Send for complete price list
Minimum Order $1
No C.O.D.'s please
AUTHORIZED ANSCO COLOR LABORATORY
COLORFAX LABORATORIES
Dept. P-95; Box 3521; Georgetown Sta., Washington 7, D.C.

Bahnsen QUALITY Color PROCESSING
EKTACHROME ONE DAY SERVICE
ROLLS.....$1.15
4 x 5, FOUR OR LESS.... 2.00
ANSCO ROLLS..... 1.15 35mm. Mtd. 1.25
117 Glenn St. Yellow Springs, Ohio POSTAGE PREPAID

Free-Lance Color Photographers
We sell your pictures to a demanding market. Picture ideas furnished. Coaching service offered. Make $100-400 per subject. Write today!
AMERICAN CALENDAR AGENCY
210 WEST 8th ST. KANSAS CITY 6, MO.

5 COLOR PRINTS for $1.00
size 2¼ x 3¼ each
24 hr. Service
3¼x4½, 45c | 5x7,90c ea.
From any size color-films. Our color prints are the best money can buy. We give your films meticulous care.
Special 4x5 size 50c ea. 5 for $2.00
GUARANTEED TOP VALUE SATISFACTION 24 Hr. SERVICE
VALU-COLOR
P.O.Box 534 Oakwood
Los Angeles, Calif.

LENS GUARDS
A Protection From Sun Rain Dust
15 sizes to fit all cameras including double lens reflex cameras
Price 15¢ to $1.00 at your local camera store
Tube no substitute
Lens Guards are made of Watsona NEOPRENE rubber
SCHOEN PRODUCTS
15029 S. Figueroa, GARDENA, CALIF.

TRANSPARENCY DUPLICATION LOWEST PRICES
Superb quality duplicates made from any type 35mm color transparency.
NEW, LOW INTRODUCTORY PRICE..... 7 for $1.00 Mounted in 2x2 mounts
LARGE QUANTITY PRICES ON REQUEST
COLOR PRINTS { 3¼"x5"....ea. .50 *Mounted; *5"x7".....ea. 1.00 in folders
Made from your Ansco or Eastman transparencies
24 HOUR SERVICE • FIRST CLASS DELIVERY
COLOR TV FILM LABS
144 5th Ave., Dept. P-9, N. Y. 11, N. Y.

DUMONTS DOES IT AGAIN!
ALL MERCHANDISE BRAND NEW!
DEJUR SPEEDLITE. Complete with batteries ..... Only $34.50
2x2 METAL SLIDE FILES (green, red, blue, gray, rust). Reg. $2.95 ..... *Special 1.79
MANSFIELD TELEPHOTO for BROWNIE Movie Camera ..... Each 11.95
MANSFIELD WIDE Angle LENSES for BROWNIE Movie Camera ..... Each 11.95
VIEWLEX V33LA AUTOMATIC PROJECTOR. 35MM. 300 Watts, Blower Cooled. Reg. $62.00 ..... Special $40.50
Order by Mail Now and Save
Please Include Sufficient Postage with Your Remittance. Otherwise Balance Will Be C.O.D.
DUMONT'S 34th ST. CAMERA EXCHANGE
150 East 34th St., Dept. 179, New York 16

LOW PRICES! COLOR PRINTS 20¢
2¼ x 3¼...25c (ANY TEN 20c EACH). SQUARE 2¼ x 2¼.
120-620 FILM WILL BE MADE
3 x 4...40c • 5 x 7...$1.25
4 x 5...60c 8 x 10... 2.00
24 HR. FILM DEVELOPING $1.00
ANSCO OR EKTACHROME SIZES 35MM (IN SLIDE MOUNTS). 82 OR 120, P820 OR 620.
MINIMUM ORDER $1.00. INCLUDE POSTAGE.
35mm DUPES 20¢ PER SLIDE
WASHINGTON COLOR PHOTO
P. O. BOX 1605 • WASHINGTON 13, D. C.

STOP BEING CONFUSED!
FREE BOOK
How Book tells all about High Power BINOCULARS Know BEFORE you buy
Newest Precision Optics
A Million Thrills
33 Models $9.95 to $125
Guaranteed Savings
Ask for Dealer's Name
FREE TRIAL Plan
BUSHNELL Binoculars
Dept. R-9 43 E. Green Pasadena, Calif.
How To Select BINOCULARS
FILL OUT! Mail TODAY
NAME
ADDRESS
CITY STATE

20¢ COLOR PRINTS 2¼ x 3¼
3X—.40 5X— .95
SEND FOR FREE MAILER 4X—.50 8X—1.95
Ansco & Ektachrome 120,-620, 35mm (20 exp.) developed and mounted. 65¢
Now GENUINE JUMBO SIZE KODACOLOR PRINTS 27c
MASTER Color Labs GPO Box 760 Brooklyn 1, N. Y.

STANRITE SUPERPOD GEARED TWO WAYS...
FROM $19.95
Horizontal gear for smooth movie panning. Geared for fast elevation up-down action. Extra 90° tilt on panhead. Ball level, many new features that have never been offered on any tripod before.
WRITE FOR FREE 24 PAGE CATALOG Dept. P.
THE MOST AMAZING TRIPOD EVER MADE
TESTRITE INST. CO., Inc. NEW YORK 3, N. Y.

CUSTOM COLOR FILM DEVELOPING
Ektachrome Anscochrome & Anscoco'or
135 20 exp. unmounted ..... $1.00 roll
135 20 exp. mounted ..... 1.25 roll
135 STEREO MOUNTED ..... 2.50 roll
828 mounted ..... 1.00 roll
620-120 ..... 1.00 roll
Sheet Film up to 4x5 ..... .50 sheet
COLOR PRINTS FROM TRANSPARENCIES
2¼x3¼.....35c 5x7.....$1.30
3x4⅝.....55c 8x10..... 2.50
4x5.....75c
COLOR CRAFT OF CHICAGO
Color Finishing Branch of Radium Camera Co., Inc. Established 43 Years.
847 Belmont Ave. Chicago 14, Illinois

GUARANTEED FRESH DATED SAFETY FILM
35MM RELOADS
ANSCO COLOR 535 Daylight: 534 Tungsten
20 Exp. roll ..... $1.00; 5 rolls $4.85
with processing ..... 1 roll $1.75; 5 rolls $8.50
New Fast ASA 32 EKTACHROME-ANSCOCHROME RELOADS
20 Exp. roll ..... $1.25 5 rolls $5.75
with processing 1 roll $1.95; 5 rolls $9.25
ARROW CAMERA EXCHANGE
8 Centre St. Hempstead, N. Y.

FILMS DEVELOPED
"Electric Eye—Never Fade"
35 mm. 36 exp. fine grain developed and jumbo high quality enlarged 1.25
20 exp. only 90c
8 exp. developed and JUMBO PRINTS in POCKET ALBUM—or 16 reg. size prints 35c
12 exp. roll ..... 50c 16 exp. roll 65c
DURO-TONE LABS. Free Mailers
BOX 52-B STATION P BROOKLYN 12, N. Y.

STATIC master
THE TRIED AND PROVEN TOOL THAT DESTROYS SURFACE STATIC ELECTRICITY
• For cleaning slides before mounting
• For cleaning negatives before printing
• For cleaning Readymounts for projection
Buy Staticmasters at your local photographic store or order direct ... sent postpaid if cash with order
$4.95
The Polonium Strip Does The Trick
NUCLEAR PRODUCTS CO.
10175 E. RUSH ST. EL MONTE, CALIF.

Add a Pellegrini VARIABLE SHUTTER UNIT
To Your Bolex H-8 and H-16
The Real Answer to Complete FADES and LAP DISSOLVES
Many Other Advantages
Send for Free Informative Booklet
TULLIO PELLEGRINI
1548 Lombard St.
San Francisco 23, California

35MM Developing
BEAUTIFUL Quality PRINTS SATISFACTION GUARANTEED
ONE DOLLAR PRODUCTION...SPECIAL ATTENTION EACH NEGATIVE!
Films fine grain developed, varnished to prevent scratching. Enlarged to 3¼x4¼, 36 exp., glossy paper $1.50. Double weight portrait paper $2.25. 20 exp. roll glossy $1.10—1 Day service. New film. 36 exp. 60c. 20 exp. 40c. Write for Free Mailers.
MINICAM PHOTO LABS. LACROSSE 23, WISCONSIN

GUARANTEED VALUES
WEDDING • BABY ALBUMS
also MUSICAL
Largest Selection of Portrait Albums.
Photogr Discount FREE New Folder PP
PHOTOFIT ALBUM CO.
131 WEST 42ND ST., NEW YORK 18, N.Y.

Automatic Daylight Developing Tank
• Processes up to 200 Ft.
• 8mm-16mm-35mm
• Movie—X-Ray—Microfilm
• Motor Driven—Portable
• Tough plastic tanks
• Uniform Density Assured
• 70mm tank also available
• Guaranteed
Write for Free Literature. Dept. P
Micro Record Corp. 407 South Ave. Beacon, N. Y.

35MM CLUB OF THE MONTH
$7.50 VALUE FOR $3.25
FREE COLOR FILM
MANY OTHER NEW FEATURES
WRITE FOR PARTICULARS
P.O. BOX HYDE PK. STA. LOS ANGELES 43, CALIF.

☆ COLOR SLIDES from KODACOLOR
35mm Color Slides from any size Kodacolor Negative! Mounted for projection. Minimum order $1.75 35¢ ea.
COLOR SLIDE DUPLICATES 20¢ ea.
35mm—Mounted. Min. order $1.00
MULTI-COLOR COMPANY
P. O. Box 54, Northridge, Calif.

the photographic market place -continued

LOWEST BULK FILM

BULK MOVIE.....ASA 50 or ASA 100

SIZE	54 Roll Container	27 Roll Container	18 Roll Container
16mm x 25'	$6.95	$4.95	$2.75
16mm x 50'	19.95	10.95	6.95
16mm x 100'	49.50	29.50	17.95

Bulk EKTACHROME ASA 40 with 1½ gal. proc. kit
5½x20' ..... $ 6.95
5½x40' 9.95
9½x40' 16.95
35mm x 37½' 6.95
SPECIAL—4½ gallon processing kit ..$3.95

BULK KODACHROME
•16mm x 100' ..$5.95
•16mm x 50' mag. 3.95
•16mm x 100' O.D. 2.96
•E.K. Proc. Included.
KODAK TRI-X
35mm x 100' ..$2.50

—35mm Fresh Bulk Negative Safety—
Kodak Plus X, Super XX, Kodak Weston 24 or Du Pont 2 or 2-100'—$1.98 ea.; 400' $7.50
Plus X, Super XX | Tri-X or Infra Red
35mm x 20 exp. cart. 6 for $1.50; 12 for $2.50

35mm McGREGOR Color. 36 exp. 1957 date. Mfg. guar. Proc. & mtg. incl. Reg. list $11.95. Day—3 for $6.99 Tung.—3 for $6.50
12 Exp.—2 for $3.65

20% Discount on all New Cameras, Projectors, etc. . . . Please Include Postage with Your Order . . .

AWON FILMS 108 W. 29th St. N. Y. 1, N. Y. (Note our new address)

FILM — FILM — FILM

FRESH ANSCO COLOR '56 DATE
35mm - 100' Day/Tung. $21.50 .. 50' $12.95
35mm x 20 Exp. D/T .. $1.20 .... 6 for $6.00
35mm x 20 Exp. O.D. ..... 35¢

ANSCO COLOR Daylight or Tung. Type 234
35mmx100' .....$11.95 35mmx50' $6.45

Kodak Tri-X, 5½" x 56 ft. $1.75
Kodak Super XX, 5¼" x 20 ft. ..... 98¢
Kodak Super-XX, 1¼" x 9 ft. ..... 3 for $1
Kodak Infrared, 5¼" x 26 ft. ..... 98¢
5½" x 20 ft. Infrared (ASA 100) or Tri-X .. 3 for $1

SPECIAL! Orig. Pack. Kodak Film
•16mmx100' Super XX. .....$3.49 ea.
•16mmx50' mag. Super X or XX. $2.95
*Kodak processing included
••16mmx50' mag. Super X or XX. $2.00
••16mmx100' Plus X Sound Film $3.25
16mmx50' Mag. Neg. $1.00
••Processing included

35mm AERO EKTACHROME—ASA 100 20 Exp.—Incl. process $1.95 .....4 for $5.25
FREE with every roll of 35mm color film, one roll of 35mm B&W film!
FREE—with $25 order—1 year subscription to Modern Photog. or U. S. Camera ($4 value).

AWON FILMS 108 W. 29th St., N. Y. C. (Our big new store)

LOWEST FILM PRICES!

FRESH-EST COLOR, 1956 DATED

Sealed, original pack; Day./Tung.; price incl. process & 35mm. mount by mfr. Mfr's. full guarantee.

Size, in lots of 3 ea.	Kodachrome	McGregor 1957 Color	AWON Color	B&W Movie ASA 50*
8mm x 25' dble roll	$3.00	$2.50	$1.98	$1.10*
8mm x 25' dble mag.	3.70	3.50		2.10*
16mm x 50' mag.	5.70	5.40	5.25	1.85*
16 x 100' roll	8.50	6.25	5.45	2.75*
35mm x 20 exp. K135	2.70	2.00	1.60	

*Buy 6; Get 1 Extra, FREE!

16mm x 100' Roll. Kodak Plus-X. $2.95
Proc. Incl. Buy 6—Get 1 FREE

CUT FILM—4x5 Kodak XX film pk. ....3 for $3.75
4x5 Ansco Super Pan Portrait (25 shts) ..3 for $3.50
8x10 Kodak TRI-X (25 sheets) ..... ea. $3.95
8x10 Ansco Color (10 sheets) $3.95
8x10 Kodak Infra Red (25 sheets) $2.95
8x10 DuPont Arrow Pan (25 sheets) $2.95
8x10 Ektachrome (10 sheets) $4.95

PAPER SALE 10x10 SWSM contact paper in orig. box. 100 sheets ...98¢
Haloid 10 x 10" Projection Paper. Dble. Wt., g1. 100 shts., orig. box. .....$1.49 ea.

AWON FILMS 108 W. 29th St. N. Y. 1, N. Y. (Note our new address)

Transparent MIRRORS

"SEE WITHOUT BEING SEEN"
Photograph people unaware. From one side it's transparent as glass. From other side it's like ordinary mirror. Used by FBI to observe and photograph people unaware.
12x12" $11.00 — 6x6" $3.00 — Add 10% postage & ins.
• Special Sizes on Request.

PHOTOS on CLOTH!

Something New, Something Different
Print your favorite pictures on cloth, wood, paper, leather, etc. Takes only 5 minutes. Won't wash out.
CHEMICAL $1.98 Prepaid
400 pictures, bottle for

WALL ST CAMERA EXCH. 80 WALL STREET NEW YORK 5, N. Y.

Finest Quality Ansco COLOR PRINTS

		Dup.
2¼ x 3¼	$0.50	$0.40
4 x 5	1.00	0.75
5 x 7 Mtd.	2.00	1.75
8 x 10 Mtd.	3.50	3.00

Individually Made — Special Color Balancing

FAST, ACCURATE, GUARANTEED
EKTACHROME
24 HOUR PROCESSING
Sheets up to 4x5 .....$ .90 ea.
120, 620 Rolls ..... 1.00 ea.
New 35mm Ektachrome (Mounted) ..... 1.25 ea.
ANSCO 120, 620, 35mm (Mounted) ..... 1.00 ea.
INCLUDE RETURN POSTAGE

CUSTOMCRAFT COLOR SERVICE
P.O. Box 4618 Dept. P Washington 9, D. C.

"ROLLEI PHOTOGRAPHY" SUPPLEMENT

This finest, most complete book for Rollei photographers is now brought absolutely up-to-the-minute with a **16 page supplement** at no extra cost. **Covers:** Light Value Exposure System; New Rolleiflex 3.5; Rolleicord models IV and V; Rolleiflash Gun; Rolleimeter Rangefinder; Rolleimarin Underwater Housing; New Films for the Rolleis. Buy it today at your dealers or, order direct — **$5.00** postpaid.

"ROLLEI PHOTOGRAPHY" MONEY BACK GUARANTEE

Camera Craft Pub. Co.
95-B Minna St., San Francisco 5, California

Sunset COLOR LAB COLOR PRINTS

5x7 COLOR PRINTS (from 35mm only) **85¢ ea.**

Color Prints from ½ 35mm to 4 x 5 Trans.
2¼ x 3¼ 25c
3¼ x 4¼ 50c
5 x 7 .....$1.00
8 x 10 .....$2.00
16 x 20 .....$12.50
Color Slide Duplicating ..ea. 25c

COLOR PRINTS 11x14...4.50 ea.
COLOR PROCESSING Ansco, Anscochrome, Ektachrome
35mm-20 exp. mtd 120-620 ..... 1.00 ROLL
Min. Order 1.50—No C.O.D.

SUNSET COLOR LAB
Box 46415, Dept. P • Los Angeles 46

Convert Your 9x12 cm. CAMERA with a MICO SPRINGBACK . .

SAVE 7.80—Reg. 13.95 NOW **5.95**
Will take Standard Holders
2¼x3¼ HOLDERS Reg. 4.08 now **279**
3¼x4¼ HOLDERS Reg. 4.10 now **295**

WOLK CAMERA COMPANY
119 S. Dearborn St. Chicago 3, Ill.

CHINACOLOR PRINTS

Finished Like Fine Porcelain

CHINACOLOR PRINTS
2¼ x 3¼ .....25¢
2¼ x 2¼ (from sq. roll film) .....25¢

	Mounted	Unmounted
3x4	$ .35	$ .50
3¼x4¼	.45	.60
4x5	.60	.70
5x7	1.50	1.25
8x10	2.25	2.00

DUPLICATE COLOR SLIDES 25¢
FROM 35M.M. ORIGINALS IN READYMOUNTS
Schools, Industry, Churches—Special rates on multiple copies from same slide.

PLEASE SEND YOUR PAYMENT WITH ORDER
Normal 3-DAY SERVICE
Minimum Order $1.00
Ansco Color Film Developed 35MM (slide mtd) 120,620, $1.00

CHINACOLOR LABORATORIES
Dept. 59-A 715 Kennedy St. N.W. Wash. 11, D.C.

MOVIE AND SLIDE TITLES

STILL AT SAME LOW PRICES!

These beautiful Titles formerly distributed by Bell & Howell—now sold direct. Large variety of backgrounds. Your wording. Get the quality only our long experience can give!
WRITE FOR FREE *illustrated catalog & samples.*
Title-Craft, Dept. P, 1022 Argyle St., Chicago 40, Ill.

1st CLASS QUALITY 1st CLASS MAIL

Your films expertly processed and rushed to you first class mail without extra charge.
8-exposure rolls developed and jumbo printed, 60c; 12-exp., 80c; 16-exp., 95c. 35mm fine grain developed and jumbo printed, 20-exp., $1.35; 36-exp., $1.85; reprints, 6c each.
FIVE DEGREES OF PAPER USED, CORRECT CONTRAST SELECTED FOR EACH NEGATIVE. Send for free mailer.
FIVE STAR PHOTO LABS.
P. O. Box 96-F Staten Island 10, N. Y.

DEVELOPED & PRINTED

OVERSIZE IN ALBUM

8 Exp. 25¢ — 12 Exp. 35¢ — 16 Exp. 50¢
20 Exp. 65¢ — 36 Exp. $1.10 — Reprints 3¢

QUICK SERVICE—Send for FREE MAILERS

B&W ASA 50
16mm 100' roll....$1.85
8mm 25' dble..... 85¢
Prices incl. processing

PROCESSING SERVICE
8mm 25' dble..... 40¢
100' roll $1.00
Spools & cans returned

CREST FILM LABS Dept. A, 9 E. 167 St. Bronx 52, N. Y.

8mm and 16mm DUPLICATES

16mm REDUCED to 8mm • 8mm ENLARGED to 16mm
COLOR or BLACK and WHITE
8mm ANIMATED TITLES 16mm
TITLES MADE TO ORDER
FREE SAMPLE TITLE Give Dealers Name

U.S. PHOTOGRAPHIC EQUIPMENT CORP.
442 ROGERS AVENUE • BROOKLYN 25, N. Y.

COLOR SLIDE DUPLICATING

20¢ EACH

35mm Mounted
Finest quality, sharpest reproduction.
One of the West's oldest color slide duplicators.
Quality Color Printing Also Available
24 Hour Color Film Processing, Ansco, Anscochrome, Ektachrome

STEDCO PHOTO
7010 Melrose Ave. Dept. P • Los Angeles 46 • YOrk 0868

MOVING?

BE SURE PHOTOGRAPHY FOLLOWS YOU. PLEASE SEND YOUR CHANGE OF ADDRESS TO
POPULAR PHOTOGRAPHY'S
Circulation Department
64 E. LAKE ST. CHICAGO 1, ILL.

4x5 COLOR PRINTS—50c

Color Film Processing
Ansco, Ektachrome
Anscochrome
35mm—20 exp. roll Mounted $1.00
120 620, Roll $1.00
Slide Duplicating 25c ea.

COLOR PRINTS
2¼x3¼ 35c
3¼x4¼ 45c
5x7 .....1.00
8x10 .....2.00
11x14 .....5.00
16x20 .....12.25
Minimum Order $1.50 No C.O.D.

CANYON COLOR COMPANY
P. O. Box 36536 Dept. P Los Angeles 36

WHOLESALE SPECIALS

All Manufacturers—All Agencies
WHY WAIT? Immediate Delivery!
Dealers, Professionals, Drug Stores, Appliance Concerns, etc.—Write on Business Letterhead for our SPECIAL PHOTOGRAPHIC WHOLESALE BULLETIN #15 ... IT'S FREE

DUMONTS 34th Street CAMERA EXCHANGE
DENIHAN STORES, INC
150 East 34th St. Dept. 110 New York 16

SPECIAL OFFER STEREO FUN REALIST KODAK

TRICK-STEREO ADAPTERS for your REALIST or KODAK stereo cameras. Very versatile. Amazing results. 2—3—4—5—6 models in one scene. Bodiless exposures, etc. Make your own STEREO ILLUSIONS. Order now at only $9.00. 3D SLIDE BARS for ALL stereo and 35mm cameras @ $7.00. Special effects, close-ups, space control, etc. Order of Trick-stereo Adapter and 3D Slide Bar $15.00. Enjoy your stereos and have FUN in or outdoors at no extra cost. Save with this ad. Free Brochure. Write

H. POWERS CO. 6411 So. Canterbury Rd. Cleveland 29, Ohio

NOW... COLOR PRINTS AT LOWEST PRICES!

2¼x3¼ ....25 5x7 ....1.00
3x4½ ....40 8x10 ....2.00
4x5 50
Duplicate Transparencies ...25¢

Ansco & Ektachrome processing ... per roll 100 (Including the **new high speed** Anscochrome & Ektachrome)

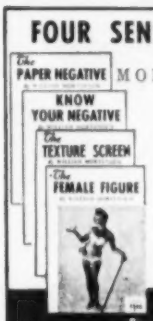
FAST QUALITY SERVICE
A Trial Will Convince You

*4x5 **40¢** EACH

*When ordered in quantities of five or more. You may even send different transparencies!

ROYALE COLOR LAB
P.O. BOX 43, GLEN OAKS BR., Dept P-9
FLORAL PARK, NEW YORK

FOUR SENSATIONAL BOOKS IN THE MORTENSEN SERIES



by William Mortensen, internationally famous author of photographic text.

- ☐ PAPER NEGATIVE
- ☐ KNOW YOUR NEGATIVE
- ☐ TEXTURE SCREEN
- ☐ FEMALE FIGURE

Check your selection . $1 each
(Add 3% Calif., 10% outside U.S.A.)

JAY CURTIS PUBLICATIONS
Box 386, Newport Beach, California

FILMS DEVELOPED & ENLARGED

8 JUMBO PRINTS in Album ONLY **30¢**

INTRODUCTORY OFFER
8 exp. Roll....30¢
12 exp. Roll....45¢
16 exp. Roll....55¢
20 exp. Roll....85¢
36 exp. Roll....1.25
35MM B&W Reloads....40¢
Ansco 35MM col. Dev. & Mtd....75¢
Ansco, Ektdc, 120-620 Dev....75¢

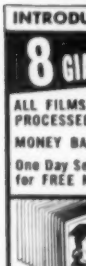
FREE MAILER
SEND POSTCARD FOR FREE MAILER TODAY
Quality Guaranteed or Money Refunded

Mel's PHOTO Box 106-Y B'klyn 20, N.Y.

INTRODUCTORY OFFER!
8 GIANT PRINTS in ALBUM 30¢

ALL FILMS INDIVIDUALLY PROCESSED
MONEY BACK GUARANTEE
One Day Service. Send for FREE MAILERS.

12 exp. Roll....45¢
16 exp. Roll....60¢
20 exp. Roll....90¢
36 exp. Roll....1.25
Ansco 35MM Col. Dev. & Mtd....95¢
Ansco, Ektac. 120-620....95¢



20 WALLET SIZE PHOTOS
From one negative or favorite photograph. Ideal to send to friends of graduation, baby, wedding, party.
98¢
Plus 10¢ postage

ENVOY PHOTO Dept. P
BOX 121 • BATH BEACH STA., BROOKLYN 14, N. Y.

10% DISCOUNT ON 6 OR MORE PRINTS

COLOR PRINTS
2¼ x 3¼ 25c
3¼ x 4½ 50c
4 x 5 ....75c
5 x 7 ....1.00
8 x 10 ....2.00
Min. order $1.50
Postpaid—No C.O.D.

HERE IT IS!! EASTMAN 35MM EKTACHROME
20 Exposure Roll....$1.40
36 Exposure Roll....$2.50
4—20 Exposure Rolls $5.00
4—36 Exposure Rolls $9.00
PROCESSING
20 Exposure Roll $1.00 Mounted
36 Exposure Roll $1.50 Mounted

COLORAMA
P.O. Box 2407 • Hollywood 28 • California

GET THE NEW EDWAL PHOTO CONCENTRATES

The most efficient, economical, and convenient darkroom chemicals on earth

— Edwal Fine Grain Concentrate
— Edwal Hi-Speed Liquid Fix Concentrate
— Edwal Signal Shortstop Concentrate
— Edwal Velvet Developer Concentrate

Less fuss, less waste! In 4-oz. and 16-oz. bottles at all photo dealers.

EDWAL SCIENTIFIC PRODUCTS CORP.
420 W. 111th St., Chicago 28, Ill.

COLOR PRINTS
Photo fans now turn to
ROCHESTER *Photo Color*
A laboratory that will warrant your confidence after your first order. All work will yield the best possible QUALITY... greater ECONOMY... SERVICE

2¼ x 3¼	3¼x 4½	5 x 7
25¢	50¢	$1
5 for $1.00	5 for $2.00	5 for $4.00

Rochester PHOTO COLOR
BOX 1623 • ROCHESTER, N. Y.

S-T-R-E-T-C-H YOUR DOLLAR
ALL MERCHANDISE BRAND NEW!

AIREQUIPT MAGAZINES—Reg., each $2.25 ....special, each $ 1.59
12 for 18.00
DALITE VERSATOL TRIPOD SCREENS 30"x40", reg. $18.40 ....special 10.40
MITTENS TITLE LETTER SET 246-¾" letters 8.95
STAINLESS STEEL 8x10 TRAYS Reg. $3.50 ....special 2.34
CONQUEST ELEVATOR TRIPOD Reg. $19.95 ....special 14.63

Write for Our Used Bargain Camera Price List Order by Mail Now and Save

Please include Sufficient Postage with Your Remittance. Otherwise Balance Will Be C.O.D.

DUMONT'S 34th ST. CAMERA EXCHANGE
150 East 34th St., Dept. 179, New York 16

COLOR PRINTS

We pledge QUALITY plus FAST service. Orders received one day, returned the next day —FIRST CLASS MAIL

Color prints	2½x3½	4x5	5x7	8x10
Price each	.25	.50	1.00	2.00

(ten of any size—deduct 10%)

COLOR FILM PROCESSING
Ansco or Ekta 35mm 20 ex. (MTD)....$1.00 ea.
Ansco or Ekta 120, 620....1.00 ea.

Save time & C.O.D. charges—remit with order.

COLONIAL LABORATORIES
1329 Milton Ave. Pittsburgh 18, Pa.

Now, TITLE WHILE YOU SHOOT

157 letters, numerals, figures. Never wear out. STICK LIKE MAGIC. With title boards & title suggestions. Postpaid. Money-back guarantee **$2.95**

FREE samples & titling ideas on request.

CLINGTITE LETTERS
1533 Hyde Park Blvd.
Chicago 15, Ill., Dept. P-9

750mm TELEPHOTO LENS

for all 35 mm single lens reflex cameras with focal plane shutters.

$18.00 fob factory. Shipped by express. C.O.D. orders require deposit. Free literature.

CARL W. JAMER, Manorville 3, N.Y.

We are looking for high grade COLOR TRANSPARENCIES
SUITABLE FOR MAGAZINE COVERS, CALENDARS, ADVERTISING, ETC.
4x5 or larger. Children, animals, industry, science, sports, landscapes, girls, human interest. Prompt replies and returns. Prompt payment. Please enclose stamped return envelope.

SHOSTAL *the agency for color photography*
545 FIFTH AVE., Dept. P-117, NEW YORK 17, N. Y.

LOW PRICED SCHOOL & CLUB FOLDERS
PHOTO MOUNTS
Send $2.00 for large variety sample assortment folders and easels.
ALBUMS Wedding Baby, Etc. Stereo Presentation
JOSEPH ROBIN
262 W. 22nd St., New York 11, N. Y., WA. 9-5044

COMPARE . . . CITATION LITE UNITS

- Small in size
- Precision engineered
- Packaged in beautiful Carry Pack complete with GE lamps

$12.95 $7.95
SEE YOUR DEALER
DAVID SPECIALTY CO. 215 W. Hubbard St. Chicago 10, Ill.

35mm Slide in COLOR set of FOUR **TITLES $1.50**
1A. Let's Get Started.
2A. Ladies Remove Hats.
3A. Intermission (Illus.)
4A. That's All, Folks.
FREE Illus. List. New, Custom Title Signature Series
See your dealer or write direct. Sorry, no C.O.D.'s.
TITLE SLIDES, 3510 White Plains Rd., N.Y. 67, N.Y.

10 Color Slides PARIS, FRANCE $1

Paris — a city of many colorful faces — bright sunshine, sparkling flowers, trim shops, bustling cafes — churches, cathedrals, art exhibits and museums. The famous Eifel Tower. 10 2x2 color slides — all different $1.00 prepaid. List of thousands of other color slides at 10 cents each sent with order.

SLIDE CO., BOX 1031, CANTON, OHIO

BULK & RELOADS Not Gov't Surplus **35mm FILM** FACTORY FRESH!

EASTMAN B & W BULK PLUS X—TRI-X Background X—Infra Red or Dupont Superior #2 27½ ft. $1—100 ft. $3.50

RELOADS 4-20 Exp. or 3—36 Exp. $1.25
EKTACHROME & ANSCO COLOR Prices on Request

ALL PRICES POSTPAID • IN CALIFORNIA ADD SALES TAX

PACIFIC COAST FILM CO. 1510 N. Sierra Bonita Hollywood 46, Calif.

35M DELUXE QUALITY FINISHING

Now you can have your photos looking their finest on double weight portrait type paper for only slightly more than the run-of-the-mill snapshot finishing. Your film will be fine-grain developed and then chemically hardened against scratching. We will then print and expose each negative individually on double weight velvet luster portrait type paper. All prints are the large 3½ x 5 inch size. 20 exp. roll $1.75. 36 exp. roll $2.75. Free mailers. 48 hour lab service.

VALUE 35MM LABS P. O. Box 38P, C. I. Station Brooklyn 34, New York

the photographic market place -continued

"BETTER PICTURES"
SINCE 1932
EXPERT FILM PROCESSING and VAPORATING
Quality Mail Order PHOTO FINISHERS

35mm -- $1.80

35mm ROLLS developed, vaporated, individually enlarged—2½x2½—$1.80. 20 exposure rolls—$1.10. Extra enlargements 2½x2½—6c each. No. 127 split candid rolls—16 exposures—enlarged to 2½x2½—85c. No. 127 and 120, 8 exp. rolls enlarged to 3½x5—60c. No. 120 or 620, 12 exp. rolls enlarged to 2½x3½—75c. No. 120 or 620, 16 exp. rolls enlarged to 3½x5—85c. Extra enlargements—5c each. Postage prepaid in U.S.A. 5c will bring you mailer and complete price list.
We fine-grain all film and individually enlarge each frame. Quality work—Prompt service.
Send roll and money today.
BETTER PICTURES
2621 West Lawrence Ave., Dept. F, Chicago 25, Ill.

LARGE SIZE COLOR PRINTS..
3¼ x 4½
3 for $1.
24-Hour Service
Try us!! Hundreds of re-orders prove our color prints are finest at any price. Why pay more?
COLOR PRINTS
Finest Quality
2¼ x 3¼
5 for $1.
Guaranteed Quality
Fast Service
Guaranteed Quality
*Postpaid 1st-Class Mail
CALICHROME
P. O. Box 9645 LOS FELIZ STATION
LOS ANGELES 27, CALIFORNIA

Save up to 60% EXAKTA VX OUTFIT
NOW 298.50
Regular $574.70 BRAND NEW
● Brand New Exakta VX* ● Pre-set Biotar lens ● Penta Prism Finder ● Split Image Rangefinder Insert ● Extra Ground Glass Insert ● Leather Case ● 100mm f4.5 Telephoto Lens ● 40mm f4.5 Zeiss Wide Angle Lens ● Exakta Extension Tube set for Close-ups ● Exakta BC Flashgun. (1953*)
NOW 143.50
Reg. $332.15 BRAND NEW 1955 EXA MX
● Exa MX ● f2.8 Tessar Lens ● Penta Prism Finder ● Split-Image Rangefinder Insert ● Extra Ground Glass Insert ● Leather Case ● 100mm f4.5 Exa Telephoto Lens ● 38mm Exa Wide Angle Lens ● Exa Extension Tube set for Close-ups ● Exa S.C. Flashgun.
WSC WALL ST. CAMERA EXCH. 30 WALL STREET NEW YORK 5, N. Y.

classified advertising

NOTICE: Rates, 75¢ per word. Minimum 10 words. November issue closes August 19th. Send order and remittance to Popular PHOTOGRAPHY, 366 Madison Av., N. Y. City 17.

CAMERAS AND EQUIPMENT TO SELL

LEICA Latest Model Extra Lenses Sacrifice. Box 451, % Popular Photography.

16MM. Sound-Used Projectors and Films. Rental, Sale, Exchange, Bargain Prices. Free Lists. National Cinema, 71 Dey Street, N. Y. C.

CANADIANS, Free Bargain List, Mills Photo Supply, Saskatoon, Saskatchewan, Canada.

LENSES—U.K. calling U.S.A. for Bargains: 5 in. F/4.5 Wide Angle $19.50. 7 in. Kodak Ektar F/2.5 $39.50. 8 in. F/2.9 (Dallmeyer Pentac Type) Anastigmat $21.50. 8 in. F/5.6 Anastigmat $21.00. 14 in. F/5.6 (Cooke Avair Type) Anastigmat $29.50. 20 in. F/6.3 Anastigmat $37.00. 36 in. F/6.3 Tele Lens $62.50. Bell & Howell 6 in. Tele F/4.5 $24.00. 10 in. F/4.5 ditto $32.50. Every lens guaranteed. Prices include carriage paid to destination. Also available complete Aerial Cameras (British and American) K.20. K.24. F.24. K8a. F.52. etc., details on request. Immediate despatch against Bankers or Money Order. Direct Photographic Supply Co., 2 Harrow Road, London W.2., Eng.

BUY at Wholesale, Cameras, Photo equipment, Recorders, Typewriters, Silverware, TV, etc. Up to 60% off! 10¢ brings amazing catalogue. Thousands of items. Terrific deals on trade-ins. Dealer's Mart, 54 Beverly Road, New Rochelle, N. Y.

DISCOUNTS. Anything photographic. Free quotations. Salvin's, 106 Perry, Worcester, Mass.

LEICA, Model G, F3.5 Elmar, perfect condition, filter, case, $95.00. Also Hensoldt 8x30 Monocular, case, $60.00. Dr. R. J. Ackart, Doswell, Virginia.

FREE! Free! Free! Central Camera Co., Photographic Headquarters since 1899, saves you money on all photographic equipment. Send for Central Camera Co.'s Free Photographic Bargain List Today: Central Camera Co., Dept. 9-A, 230 S. Wabash, Chicago 4, Ill.

NEW Leica M-3, F2 Summicron, $180 cash plus your clean Leica III-f, F2 Summicron, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW Leica M-3, F2 Summicron, $205 cash plus your clean Leica III-f, F2 Summitar, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW Leica M-3, F1.5 Summarit, $220 cash plus your clean Leica III-f, F2 Summitar, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW Leica M-3, F3.5 Elmar, $175 cash plus your clean Leica III-f, F3.5 Elmar, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW Leica M-3 body, $155 cash plus your clean Leica III-f body, Altman's, 64 E. Monroe, Chicago 3, Ill.

LEICA M-3 cameras, lenses, new, used, cash, trade, Altman's, 64 E. Monroe, Chicago 3, Ill.

LINHOFS, one of our specialties, in 2¼x3¼ and 4x5 sizes, Altman's, 64 E. Monroe, Chicago 3, Ill.

LOW READER RATE

Popular PHOTOGRAPHY has established a new classified rate for readers only of 45¢ per word—minimum 10 words. This reader rate can only apply to those advertisements describing for sale, barter and/or exchange, merchandise of a purely personal ownership, and not in any sense merchandise or services offered on the part of a dealer or others. The commercial rate remains 75¢ per word, minimum 10 words.

KODAK Ektra, f1.9, Immaculate, $185.00. 90mm Ektar/Ektra, $79.50. 35mm Ektar/Ektra, $79.50. Ektra accessories! Leicas galore—new & used models II—III—IIIc—IIIf—M3 outstanding buys—all accessories in stock! Leica IIIa, f2 Summar, $78.00. 90mm f2.2 Leica Thambar, spotless, $87.50. Get our trade-offer against new Leica! Contax IIIa, f1.5 Sonnar, $189.00. Zeiss Headquarters! See the New Contax Stereo with Projector! Terrific buys—all contax models, accessories! New Exakta VX, f2.8 Tessar, $157.00. New Exakta VX, F1.9 Primoplan, $172.00. New Exakta VX, f2 Biotar, $216.00. New Exakta VX, f3.5 Tessar, $149.00. New Exakta VX, 80mm f2.8 Tessar, $189.00. Largest selection—Tremendous Savings—all Exakta Equipment! Rolleiflex MX, f3.5 Xenar, $142.00. Rolleiflex f3.5 Tessar, $89.00. Rolleiflex 2.8c Xenotar, spotless, $219.00. Rolleicord, f4.5 Triotar, $45.00. National Graflex, f3.5 Tessar & telephoto, $76.00. Sept 35mm sequence camera, $79.00. Kodak Chevron, f3.5 Ektar, $148.00. Medalist II, f3.5 Ektar, spotless, $124.00. Hasselblad, f2.8, $259.00. Primarreflex II, f3.5 Primotar, $119.00. Latest Zeiss Contaflex, f2.8 Tessar, spotless, $116.00. Terrific buys—all leading brands! Highest trade-in allowances—write for our quotations! American Camera Exchange, 210 W. 7th Street, Los Angeles 14, Calif.

NOTICE!

In replying to Box Numbers, be sure to address letters to

Popular PHOTOGRAPHY

366 Madison Ave., New York 17, N. Y.

Note: This does not apply to Box Numbers where City and State are shown.

NEW Kodak Retina III-c, $75 cash plus your clean Retina II-a, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW Zeiss Contaflex I, $65 cash plus your clean Retina II-a, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW Zeiss Contaflex II, $85 cash plus your clean Retina II-a, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW cross-coupled Auto Rollei, F3.5 Tessar, case, $95 cash plus your clean M-X Auto Rollei, F3.5 Tessar, case, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW cross-coupled Auto Rollei, F3.5 Xenar, case, $95 cash plus your clean M-X Auto Rollei, F3.5 Xenar, case, Altman's, 64 E. Monroe, Chicago 3, Ill.

NEW cross-coupled Rolleicord V, case, $55 cash plus your clean Rolleicord IV, case, Altman's, 64 E. Monroe, Chicago 3, Ill.

EXCLUSIVE German-made leather compartment case for Leica M-3 outfit. Holds Camera with lightmeter and 50mm lens attached. Place for 35mm, 90mm, 135mm lenses, flashgun, sunshades, filters, miscellaneous accessories, yet small, beautifully made, plush lined, must see to appreciate, only $34.50 postpaid. Money back immediately if not completely satisfied, Altman's, 64 E. Monroe, Chicago 3, Ill.

MINOX III, spotless $75, Altman's, 64 E. Monroe, Chicago 3, Ill.

ALPA 7, F1.8 Kern Switar, spotless $265, Altman's, 64 E. Monroe, Chicago 3, Ill.

35MM to 400mm Leitz lenses in stock, most complete stock of Leica accessories anywhere, Altman's, 64 E. Monroe, Chicago 3, Ill.

MEDALIST IIs with cases, some slight use $125; like new $150; spotless $175, Altman's, 64 E. Monroe, Chicago 3, Ill.

CONTAX II-a, F2 Sonnar, spotless $165, Altman's, 64 E. Monroe, Chicago 3, Ill.

EXAKTA VX, F2 Biotar in automatic diaphragm, spotless $225, Altman's, 64 E. Monroe, Chicago 3, Ill.

EXAKTA VX, F2.8 Westanar in automatic diaphragm, spotless $165, Altman's, 64 E. Monroe, Chicago 3, Ill.

S.E.I. exposure meter, spotless $95, Atlman's, 64 E. Monroe, Chicago 3, Ill.

HASSELBLAD, F2.8 Ektar, spotless $250, Altman's, 64 E. Monroe, Chicago 3, Ill.

THE World's Finest Cameras, their lenses, their accessories, our specialty, Altman's, 64 E. Monroe, Chicago 3, Ill.

CHICAGO Visitors, our unusual displays of the finest photographic equipment will interest you, located in the heart of the Loop, Altman's, 64 E. Monroe, Chicago 3, Ill.

ENGLISH Lenses! 8" F2.9 $28.50, 14" F5.6 $32.50, 20" F6.3 $45.00, 36" F6.3 $75.00. Duty Paid. 7" Aeroektars $42.50. Baer's, 247 E. Frederick, Lancaster, Penna.

SENSATIONAL discounts! Cameras, projectors, lenses, accessories. Jesse Sanchez, 323 Dahill Road, Brooklyn 18, N. Y.

CHICAGO'S Largest Camera Trading Center! Open evenings! Better deals! New-Used! Mailorder satisfaction! Chromoptics, 943 N. State, Chicago 10.

CANADIANS send for bargain list, new and used equipment. Simon's Camera Exchange, 11 Craig West, Montreal, Canada.

DISCOUNTS 20% to 50%—Cameras, Projectors, Tape Recorders, Lenses. Write for Individual Quotations, No Catalogs. Classified Camera B, 2375 East 65 St., Brooklyn 34, N. Y.

CAMERAS AND EQUIPMENT WANTED

LEICA cameras! Leica lenses! Leica equipment! The very highest prices paid air mail immediately! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

CONSISTENTLY paying more! Urgently wanted now; Kine Exaktas, Rolleiflex, Bolex H-8, H-16, Bell & Howell, Leica, Linhof, Retinas, Graphics, Hasselblad, Contax, Stereo Realist, 8mm & 16mm movie equipment! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

HASSELBLADS, Bolex, Contax, Kodak Ektra cameras & Lenses—will pay premium price! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

NIKON-CANON cameras, lenses! Immediate air mail cash! American Camera Exchange, 210 W. 7th St., Los Angeles 14, Calif.

MAIL your camera today. Will send check by Air Mail. Items held ten days for your approval. Highest prices in the United States. Reitman Camera Exchange, 1900 E. 9th St., Cleveland 14, O.

LENSES, Aerial Cameras, Gun Cameras (GSAP), Motion Picture Cameras, Still Cameras. Cash airmailed immediately for these and Aerial Lenses, including 6" Metrogon, 7" Aeroektars, 20" and 40" Bausch and Lomb. Gordon Enterprises, 5362 N. Cahuenga, N. Hollywood, California.

WANTED Ektra Cameras and Complete outfits. Rednal, Room 239, 890 Sixth Ave., New York, N. Y.

USUAL and unusual lenses. We buy cameras and equipment for cash. We need in particular Hasselblads, Bolex H, Auto Rolleis, Exaktas, Argus C3, Leicas, Graflexes, Reveres, Bell & Howells, 4x5 Graphic Views. Westen's, 800 State, Santa Barbara, California.

CASH—Airmailed Same Day. Ship at our expense, cameras, projectors, lenses. Letters are a delay. Highest prices guaranteed. Equipment returned prepaid if not satisfied. Established 1920. Reliable Camera Exchange, 515 South Main Street, Los Angeles 13, California.

LEICA cameras, lenses, accessories, Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

NIKON cameras, lenses, accessories, Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

ROLEX and Bell-Howell cameras Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

ROLLEIFLEX cameras, accessories, Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

EXAKTA cameras, lenses, accessories, Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

LINHOF cameras Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

RETINA II-a cameras Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

PACEMAKER Graphics Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

CONTAX cameras, lenses, accessories, Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

CONTAFLEX cameras, Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

HASSELBLAD cameras, lenses, accessories, Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

CANON cameras, lenses, accessories, Urgently Needed, cash via airmail, Altman's, 64 E. Monroe, Chicago 3, Ill.

YOU will get top cash by return mail for quality foreign and domestic cameras and lenses. Equipment held ten days for your approval. Sell now to Indiana's best known and largest camera and photo supply house. Hoosier Photo Supplies, Inc., 51 Monument Circle, Indianapolis, Indiana.

IMMEDIATE airmail payments for cameras, lenses, accessories! Highest Prices! Quality equipment wanted! Open evenings! Chromoptics, 943 N. State, Chicago 10.

WE buy, sell or trade photo equipment. Will pay top prices. Leicas, Contax, Rolleiflex, Bell and Howell, Bolex, etc. Sell to the largest camera co. in the middle west. Check sent same day equipment received. No waiting. Will hold equipment 10 days for your approval. Lincoln Camera Co., 219 W. Washington, Indianapolis 4, Ind.

FOUND the Store paying the highest cash prices for your used Cameras and Lenses. We buy, sell and also exchange. Broadway Camera Exchange, 2130 Broadway (75th St.), New York 23, N. Y.

STEREO

WORLDWIDE dimensional coverage in breathtaking Kodachrome. Complete your collection from 1200 views, sent on approval. Free catalog. Ernest F. Wolfe, PSA, 10916 Ashton Avenue, Los Angeles 24, California.

ILOCA Stereo Camera Owners—Model I (30x24mm.) Valuable free information and gift. Send postcard today. Busch Camera Corp., 846 W. Adams, Chicago 7.

MOVIE FILMS Rented—Sold—Exchanged

BUFFALO Film Exchange buys-sells used films! Free lists! 1339 Jefferson Ave., Buffalo 8, N. Y.

8MM OUTSTANDING Kodachrome library. Free listings and projection sample; $1.00. Film Wizard, Hollywood 38, Calif.

FREE catalog. New 8 & 16 MM releases now available. Box 14, Midtown Station, N. Y. 18, N. Y.

KODACHROME movies-projection sample $1.00. SOF rentals, lists 10c. Galloway Films, Box 6953A, Washington 20, D. C.

5,000 NEW, used 8-16mm silent, sound films. International-Z, 2120 Strauss, Brooklyn 12, N. Y.

HUGE listings, color, B&W sports, comedies, travel, musicals, etc. Catalog 15c. Turke Films, 423 S. Lincoln St., Hinsdale, Ill.

RENT 16mm sound films 50c reel. Large selection; free catalog. U. C. Film Service, 130 Chestnut St., Roselle Park, N. J.

RENT 16mm sound films by mail. Over 1500 subjects to choose from. Latest Major Releases. Features. $4.95 up; 400-foot shorts, 75c. Send for catalogue. Liberty Camera Shoppe, 80 Vesey St., New York 7, New York.

FREE Catalog—8—16MM Film Now Available. Best Rite Sales Co., P. O. Box 357, Times Square Station, New York 36, N. Y.

FREE! Blackhawk's big sale catalog new and used 16mm, 8mm films; 2"x2" color slides; used 16mm sound projectors. Biggest stock in U.S.A. Blackhawk Films, 1203 Eastin, Davenport, Iowa.

FILMS AND PAPER

SAVE 50%! Guaranteed—fresh color, b&w movie film! 8mm, 16mm. Free catalog! ESO-F, 47th Holly, Kansas City 12, Missouri.

PHOTO SUPPLIES

EMPTY 35mm Film Cans. Specify Ansco, Kodak, 20 for $1.00. M. D. Abuhove, 110 S. 16th St., Phila., Pa.

PRINT Any Photo on Paper, Cloth, Leather, Wood! Simple, easy to use! Magic Powder reproduces any snapshot on stationery, handkerchiefs, ties, scarfs, etc. Won't wash off! Won't hurt negative or material. Personalizes your belongings! Makes ideal gift! Complete outfit with full colors included, enough for 100 photos, only $1.00 postpaid! "Gift Catalog" Free with order! Fern, 1341 West 67th, Chicago 36, Illinois.

PHOTOMOUNTS 3x5's $3.50/100, 5x7's $5.00/100 f.o.b. here. Free samples, price list. Manufacturers Penn Photomounts, Glenolden, Pennsylvania.

ALBUMS! Wedding, Baby, Photographer and customer's names in gold! Free catalog. Crestwood, 3601 West 71st., Kansas City, Missouri.

PHOTO FINISHING

35MM—36 exp. developed and enlarged 3¼x4½—$1.10 with this ad. Flash-Foto Box 36Y, Bklyn 4, N. Y.

TRI-X Negative developing our specialty. All types 16mm. negative and positive processing. Send for price list. Back Bay Film Laboratory, 28a Huntington Avenue, Boston, Mass.

ENLARGEMENTS Portrait Paper 5x7, 35c, 8x10, 65c, Oil Colored $1.50 additional. Negative from Photo, 50c; Miniatures, 50c; Minimum Order $1.00 cash. B. C. Gillmore, 4604 Nelson Blvd., St. Louis 20, Mo.

FREE roll film (#127, #120, #620, or #616) with every roll developed and printed. 8-exposure 60c; 12-exposure 75c; 16-exposure 95c. All prints oversize. Custom Photo Labs, Box 126-PF, Berwyn, Ill.

ENLARGE your vacation memories! Two 8x10's or three 5x7's: $1.00 Cash. Free Mailer. Jay's Custom Foto-Finishing, Box 29-P, Secaucus, New Jersey.

ENLARGEMENTS, Professional Quality, individual attention given to all orders. Doubleweight Glossy, Semi-matte, Silk, matte. 5x7, 30c; 8x10, 40c; 11x14, 80c; 16x20, $2.00. Fine-grain negative from photo, 60c. Complete service available. Minimum order, $1.00. Bristol Laboratories, 155 School Street, Bristol, Conn.

PHOTOMURALS from negatives, prints, transparencies. 20"x24", $3.00; 20"x30", $3.50; 20"x40", $4.00; 30"x40", $4.75; 40"x60", $9.00; 48"x72", $12.00. Mural-grain copy negatives, $1.00 additional. Forward orders for larger size murals, mural mounting, sepia murals on estimate basis. Muralcraft Murals, 157 School Street, Bristol, Conn.

NATURAL Full-Color Murals from transparencies, B&W negatives or prints. Satisfaction Guaranteed. 20"x24", $15.00; 20"x30", $17.50; 30"x40", $25.00; 40"x60", $35.00. Colorcraft Murals, 157 School Street, Bristol, Conn.

RESTORE old, cracked, faded photographs. Free Estimate. Photocraft Restorations, 155 School Street, Bristol, Conn.

ABSOLUTELY highest quality professional enlargements at dealers prices. 5x7, 28c; 8x10, 35c; 11x14, 70c. No extra charge for cropping or dodging. New negative from your photo 50c; minimum order $1.00. Foto Portrait Co., 1172-P Ogden Ave., New York City 52.

FINEST quality bromide enlargement at dealers' prices. 5x7, 28c; 8x10, 35c; 11x14, 70c. Satisfaction guaranteed. Minimum order, $1.00. Foto Portrait Co., 1172-P Ogden Ave., New York City 52.

ENLARGEMENTS of superb quality. 5x7, 25c; 8x10, 40c; 11x14, 80c; 16x20, $1.75. New negatives, 50c. Oil coloring, retouching. Minimum order, $1.00. Barzell Photo Service, 796 East 175th St., New York 60, N. Y.

GIANT photos a specialty. Introductory offer 40 by 48 $6.50 from your negative or print. Ideal for home or office. Warner Studio, 408 E. 11th St., Kansas City, Mo.

NO Negative? Send $1.00 for new negative and two 5x7 enlargements from picture, colorslides, colorprint, polaroid, stereoframes, tintypes. Inquire Movieframe Enlargements. Projectionslides, Lanternslides from any print or negative black and white 3 one dollar. Colorslides from any Kodacolorprint, printon, 4 two dollars. 20, 36 Exp. Direct Positive film delivered and reversed developed. Curiophoto, 1187 Jerome Ave., New York 52.

2x2 SLIDES kodachrome or black and white slides from your positive transparency or picture 25c each. Photo Copy Shop, 269 W. 15th St., Holland, Mich.

COLOR PHOTO FINISHING

ANSCO Color Prints by New England's Oldest Authorized Ansco Color Finisher. Wallet Size, special 10c; 2¼ x 3¼, 25c; 3¼ x 4, 35c; 4 x 5, 50c; 5 x 7, $1.00; 8 x 10, $1.50. Ansco and Ektachrome Color Film $1.00 per roll processed. 35mm is mounted. Minimum Order $1.00. No C.O.D. Please. Guaranteed to satisfy or your money back. U. S. Color Mart, Box 2222, Hartford 1, Conn.

EKTACHROME Anscochrome carefully processed. 35mm-$1.25, 620-$1.00, 4x5-45c. Kenmore Color Box 93, Kenmore, N. Y.

THE full beauty of your favorite color shot can be reproduced in a dye transfer color print. Write for complete information and sample print. Percival E. Walsh, 245 Ridgeway Ave., Rochester 13, N. Y.

LUSTRECHROME Color Prints have a rich, lustrous surface; free from glare, finger printing, minor scratches. Anscochrome, Ansco Color, Ektachrome Processing; Duplicates. Free price list. Color Classics Laboratories, P. O. Box 5198, Tucson, Arizona.

EKTACHROME-Anscochrome—35mm Processed—Mounted $1.00. Professional Quality. National Color Corporation, Box 55-N.S. Br., Atlanta, Georgia.

COLOR SLIDES

COLOR Slides. Relive your vacation trips. 1,000 Travel Kodachromes. Free list (sample 30 cents). Send today, Kelly P. Choda, P. O. Box 588, Stanford, Calif.

DESERT Wild Life. Ten Colorslides $1.00. Eddings. 8 Roberts, Corning, N. Y.

BAKE'LITE 2x2 slide file trays, used. 30 slots, ideal storage. $4.50 dozen. Sample 50c. Norwood Speedrite electronic flash meters. $2.95. Postpaid. Money back guarantee. Bargain list free. Barnett, 2419 N. Halsted, Chicago 14, Illinois.

OUTSTANDING original western views available, suitable for reproduction. 4x5 Ektachrome and 35mm Kodachrome. Reggie Hibshman, 2615 E. Cherry, Seattle 22, Washington.

COLOR Slides—Vanishing America and Scenic New England—Free list. Weldon Color Slides, Monson, Mass.

COLOR Slides By Known Professional Photographers. Used by thousands of travelers, lecturers and collectors. Exteriors and Interiors. Relive your marvelous trip abroad. See again Paris, Rome, Venice, Florence, England, Scotland, Switzerland, etc. Also, Athens, India, Egypt, Morocco, Bali, Mexico. Catalog "P" Free. Argo Slides, 62 William Street, New York 5, N. Y.

SHRINES Of Europe And Holy Land. Lourdes, Fatima, Lisieux, Miraculous Medal, Chartres, Assisi, etc. Exteriors and splendid Interiors. Lives of Christ and Mary. 50-page catalog "R" Free. Argo Slides, 62 William Street, New York 5, N. Y.

CHROMASLIDES—an outstanding collection of scenic America in brilliant color. Catalog and Sample, 10c. Chromaslides, p-559, Box 325, Alexandria, Virginia.

BANFF Rainy? California "Hazy"? Miss shots? Name Park or Scenic Area of the West, Canada, Mexico. Select from large Kodachrome Approval Selections. Douglas Whiteside, Yosemite, California.

"ALASKA Big Game in Color." Sharp, colorful, closeups, live game in Alaska's Wilderness. Free catalog—all Alaska subjects. Set—12 game slides, airmail, $5.00. Northern Color Film Co., Box 4, Cooper Landing, Alaska.

TRAVELLERS—Complete your collection—Worldwide Kodachrome Slides on approval—2x2 (35mm) and stereo (3D). Interiors, scenics, human interest—shots you couldn't get because of restrictions or bad weather—shots you need to fill the gaps in your collection. Choose from 4000 super-Kodachrome slides from 57 countries, or 1200 stereos, rushed to you same day by airmail or on approval. Name the spot, we'll furnish the slide. Send 25¢ (Deductible from first order) for 40-page, 4 color illustrated catalog, with detailed description of 35mm slides. Stereo list free. Ernest P. Wolfe, PSA, 10916 Ashton Avenue, Los Angeles 24, California.

SLIDES Of The East. White Mountains, Plymouth, Lexington, Cape Cod, Niagara, Ausable Chasm, Santa's Workshop, New York City, United Nations, Quebec, Gaspe, Bermuda, Fall Foliage, many others. On approval at new low price. Send for catalog of beautiful 2 x 2 color slides by Henry Cobb Shaw, 8-3 Bosworth St., Boston 8, Mass.

FINGER Lakes; Falls, Glens, Lilacs, Roses, 2x2 kodachrome 50c; 6, 2.50: List. Vincent Tollis, Lima, N. Y.

50 KODACHROME slides $11.00, lists with sample 35c. Galloway Library, Box 6953A, Washington 20, D. C.

SPECIAL! Four beautiful stereos or slides plus catalog. $1.00. J. DuBois, 5880 Hollywood, Hollywood 28, Calif.

GREAT Artist Study Slides. French, Italian, etc. 3 for $1.00, 16 for $5.00. Artco, Box 46123a, Hollywood 46, Calif.

130,000 SLIDES in stock insures quick delivery. Production by Captain Arps, U. S. Navy, retired, insures satisfaction. Description of scene on each slide makes constant reference to catalog unnecessary. Send 6c (stamps) for new 48 page catalog United States, Canada, Mexico. If interested in other foreign countries, mention countries and add 3c, as these are separate lists. Worldwide coverage. RoLoc, Box 1715, Washington 13, D. C.

BEAUTIFUL color slides 10c each. Send dime for sample and latest issue, "Slide News". Slide Supply, Box 1031, Canton, Ohio.

THIS Ad Worth 50c. Send ad and $2.00. We'll send you five colorful Situation Slides, value, $2.50. Or send for free list. Nickelodeon Co., Box 792P, Walla Walla, Washington.

CAMERA REPAIRS

COMPUR, Wollensak, Graflex, Supermatic, Ilex, Leica, Prontor, Argus and Robot Shutter Repair Service a Specialty (prompt 24 hours' service). Central States Camera Repairs, 3116 E. Douglas, Wichita 8, Kansas.

THIRTY years of camera repair experience. Your guarantee of precision workmanship. Factory guaranteed service on Rolleiflex, Rolleicord, Exakta, Exa, Canon, Nikon, Bolsey. Estimates gladly furnished. Pacific Photo Products, 3210 W. Olympic Blvd., Los Angeles 6, California.

RELIABLE service. Internal synchronization, any camera $12.50 up. Guaranteed. Foto-View, 323 West 42nd St., New York 36, N. Y.

NEOPRENE coated curtains installed in Korelle, Exakta, Leica, Foth by factory trained Technicians. B & V Camera Repair Service, 21 E. Van Buren St., Chicago 5, Ill.

QUALITY Camera Repairing. August Camera Repair, 611 N. Harper Ave., Hollywood 48, Calif.

PHOTOGRAPHERS!

10c

BRINGS YOU
105 EASY-TO-FOLLOW

"PHOTO TIPS"

Here's a roundup of over 100 ideas, hints, tips and suggestions for making your photo chores easier, faster and a lot more fun—right out of the pages of POPULAR PHOTOGRAPHY — the top magazine among camera fans everywhere.

"PHOTO TIPS" will save you time, money and effort—particularly in the darkroom. It's full of "how-to-do-it" illustrations that will improve your technique—help you get more fun from photography. Send for your copy of "PHOTO TIPS" today—only 10c!

POPULAR PHOTOGRAPHY,
366 Madison Avenue, New York 17, N. Y.

Here's my 10c. Please send me a copy of "PHOTO TIPS" containing over 100 photo ideas.

Name _____

Address _____

City _____ *Zone* ____ *State* ____

GUARANTEED, insured repairs at fair prices. Specialists in synchronization, Leicas, Rollels, etc. Camera Repair Corporation of America, 225 Broadway, New York City 7.

LENSES made and repaired. Hard coating for sharper pictures, faster speed. Recementing, repolishing, light scratches and haze removed. Complete binocular repairing. Guaranteed workmanship. Send lenses or binoculars or write for free estimates. Gould Lens Service, 26F Franklin Ave., Binghamton, N. Y. Free descriptive folder.

PERFEX repair on Still and Movie model, using genuine replacement parts. (Only authorized Perfex firm in U. S.) Send camera for estimate. International Camera Corp., 846 W. Adams St., Chicago 7, Ill.

UNIVERSAL (Cinemaster, Mercury, Roamer) still and movie camera repairs. Trained technicians. No projectors. All work guaranteed. Two-week delivery. Estimates sent on all work. International Camera Corp., 846 W. Adams, Chicago 7, Ill.

CANON Cameras—Complete service, all models. Work guaranteed. Send camera for free estimate. International Camera Corp., 846 W. Adams, Chicago 7, Ill.

BRISKIN movie cameras repaired by qualified technicians. All work fully guaranteed. Ten day delivery. International Camera Corp., 846 W. Adams St., Chicago 7, Ill.

BUSINESS OPPORTUNITIES

PHOTO Shop, Juneau, Alaska; Eastman, Zeiss, Pavelle agency; Robert Druxman, 104 Front, Juneau, Alaska.

MONEY with your 8MM camera? Highly profitable. No overhead. Details free. Film Wizard, Hollywood 38, Calif.

FREE Lancers! Sell your photos to the huge house organ field. 3,000 company publications buy! Payment from $10 to $100 for single photo—and captions. Free information. Gebbie Press Pictures, 19 E. 48, N. Y. C. 17.

100% PROFIT. No investment—Handle quality fotostamps. Amazing glossy photographs, gummed stamp form. Business year 'round. Free samples, particulars. American Foto Stamp Co., 103 East 125th St., Dept. P9, New York.

ENVELOPES addressed accurately, reasonably. Fast service. We have capable addressers in your city. Glenway System, 5713 Euclid, Cleveland 3, O.

$200 WEEKLY cleaning Venetian Blinds. Free Book. Burtt, 2434AI, Wichita 13, Kansas.

FREE Illustrated Book "505" Odd, Successful Businesses." Work home! Pacific-PY4, Oceanside, Calif.

PHOTOGRAPHERS, all types: You can add materially to income almost automatically having Wells reproduce your customers' pictures on Lamp Shades, Tiles, Compacts, Brooches, Bracelets, Fobs. Beautiful. Unique processes and appearance. No competition. Liberal discounts. Wells Studios, 14040 Euclid Avenue, Cleveland, Ohio.

FREE "$5,000—$45,000; Unlimited Vacations." Work home! Grateful enough to send offering if successful? Haylings-PYY, Carlsbad, Calif.

$100.00 WEEKLY Deposited in your mail box? Details Free! Aldensmith, 2708-Y Ladera, San Bernardino, Calif.

STEREO earns $60.00 up on weekends. Learn profitable markets. Write today. Jacobs, 6'2 Cecil, Louisville, Ky.

HELP WANTED

A Dress Shop in your home. No investment. Liberal sales commissions. Write Bellecraft Fashions, 111YQ Eighth Ave., New York.

INSTRUCTION

CAMERA Repairmen greatly needed! You can learn manufacturers' service methods at home, in your spare time! Free, big illustrated book tells how! Write today. National Camera Repair School, Dept. P20, Englewood, Colorado.

OIL coloring photographs—A fascinating hobby or profitable sideline for those with artistic talent. Learn at home. Easy, simplified method. Free booklet. National Photo Coloring School, 835 Diversey Parkway, Dept. 2252, Chicago 14.

YOU can repair and service Leicas, Contaxes, Speed Graphics and other cameras, shutters and photographic equipment easily, quickly and make good money. Big reference service manual shows you how you can. Where to buy your material and stock parts, and how to save money buying your tools and shop equipment to start your own repair shop. Satisfaction or your money back. Write to: E. Valera, P. O. Box 21, Morton Grove, Ill.

PHOTOGRAPHY for pleasure or profit. Learn at home. Practical basic training. Long established school. Free booklet. American School of Photography, 835 Diversey Parkway, Dept. 2252, Chicago 14.

LEARN Retouching. Complete Home Study Course including all equipment. Easy payments. Money back Guarantee. Full price $21.50. Write for Free literature today. Marshall Art Studios, Dept. X, 3723 Fullerton Ave., Chicago 47, Ill.

COSTUMES AND PROPS

BIKINI, PosePatch-Bra, PosePanel-Scarf, Briefee Sarong, Multi-Purpose Posette. Each $3.00. Includes PoseKlothes Photo Catalog. Catalog alone $1.00. PoseKlothes, Box 203, T&C Branch, Sacramento 21, Calif.

LEOTARDS, Bikinis, Costumes. Actual Photo illustrations, $1.00. Stan Stanton, Liberty 3, New York.

ATTN: Shutterbugs! Big Selection Swim Suits, Bikinis, Costumes, Accessories, Portrait Drapes, Etc. Finest Quality. New Pictorial Catalog $1.00* (*Applies on Merchandise). Maureen of Hollywood, 128 So. Alvarado, Dept. 2, Los Angeles 57, Calif.

FOR INVENTORS

INVENTORS—If you believe you have an invention, you should find out how to protect it. Send for copy of our Patent Booklet "How to Protect Your Invention" and "Invention Record" form. No obligation. McMorrow, Berman & Davidson, Registered Patent Attorneys, 244-S Victor Building, Washington 1, D. C.

STAMPS AND COINS

FREE—Valuable U. S. A.! (1) Scarce genuine stamp picturing first U. S. A., issued in 1847! (2) Big collection 30 all-different U. S.; ancient 19th century, valuable $5 stamp, etc. (3) Packet gorgeous Commemoratives. (4) Large illustrated U. S. catalog; 64-page, four-color Collectors' Guide; other unusual offers. Everything for only 10c covering mailing costs! Harrisco, 1045 Transit Bldg., Boston 17, Mass.

MISCELLANEOUS

NEGONTAINERS—glassine, cellophane slide mounts, releases, embossers, stickers, business cards, negative files, "Press Plates," others. Free Literature, samples. Lutz Co., Box 5, Syracuse 1, N. Y.

BUSINESS printing for photographers. Samples free! McIlvaine, Box 86-D, Brooklyn 30, N. Y.

TAPE Recorders, tapes, accessories. Unusual values. Dressner, Box 66P, Peter Stuyvesant Station, New York 9.

2x2 SLIDES from any size negative 15c, unmounted 10c. Duane Stebbins, Box 62, Agawam, Mass.

BIZARRE Book Service, 40 East 23rd St., New York 10, N. Y., Dept. 114. Specialists in Out-Of-Print books. Collectors; write, indicate title, author or subjects desired. Send self-addressed, stamped envelope for reply.

BOOKS, booklets, stories, arts, novelties, illustrated Comic booklets, 20, $1.00. Catalogues 10c. Kogan, 1032-P, Church Annex, New York 8, New York.

SAVE 25%! Get interesting facts. Free 56 page Binocular, Telescope Catalog. $3.95 to $250.00! United, 9043 S. Western, A-2944, Chicago 20. Dealers Wanted.

CAMERA Insignia Tie Clasp, Smartly styled, One Dollar, Jerry Martin, 247 West 46th Street, New York City.

SAN FRANCISCO! 10 Fascinating Photographs, Beautiful Salon Originals created by Famed California Photographers! $1.00. Western Pictorial Guild, 3575 Sacramento Street, San Francisco 18, California.

FREE Book Catalog, 1000 interesting titles. Books Publishing Co. Amityville 1, N. Y.

MODEL Releases, 100 forms $1.00, Quality Business printing, Save! Free price list, Elichs, Box 453, Bloomington, Indiana.

FREE Lancers! Amateur Photographers! Sports magazine needs current and unusual sports photos with captions. 5x7 series ok $2.00 each on acceptance. P. O. Box 2827, Denver, Colorado.

INDEX OF ADVERTISERS

September 1955 Popular Photography

ADVERTISER	PAGE NO.
Air Photo Supply Corp.	45
Alco Photo Supply Corp.	28
American Optical Company	15
American School of Photography	126
Ansco	SECOND COVER, 3
Apt Corp.	118
Arrow Metal Products Co.	126
Art Center School, The	117
Atkinson Laboratory	117
Bass, Inc., Alfred	128
Bass Camera Co.	126
Bell & Howell	110
Brockway Director Corporation	5
Brooks Cameras	101
Brooks Institute	124
Brown-Forman Industries	114
Burleigh Brooks, Inc.	9, 121
Camera Import Corporation	16
Canon Sales Co., Inc.	50
Capital Camera Co.	117
Central Camera Co.	128
Century Photographic Equipment Co.	130
Cinema Lens Co.	37
Cohen's Exchange, Inc., Abe	52
Color King Labs	42
Columbian Enameling & Stamping Co., Inc.	128
Davidson Manufacturing Co.	116
Delpro Sales Co.	130
Delta Photo Supply	117
Dowling's	18, 19, 20, 21, 22, 23
Eastman Kodak Co.	FOURTH COVER, 96, 97
Edixa Camera Works, Wirgin Brothers	8
Edmund Scientific Corp.	140
Enteco Industries, Inc.	12
Exakta Camera Company	13
Federal Manufacturing and Engineering Corporation	56
Freestyle Sales Co.	125
Geedee Products	131
General Electric	THIRD COVER
Germain School of Photography	128
Golden Gate Color Prints	131
Graflex, Inc.	4
Grand Central Camera Exchange, Inc.	102, 103
Greenberg: Publisher	128
Hawaiian Stereos	128
Heiland	24, 25
Interstate Photo Supply Corp.	120
Kinnard Co.	127
Kling Photo Corp.	122, 124
Leitz, Inc., E.	60
Mamiya Camera Company of America, Inc.	112
Marshall Mfg. Co., Inc., J. G.	48
Melton Industries	127
Miniature Film Supply Co.	131
Minifilm Camera Corp.	29, 30, 31, 32, 33, 34, 35, 36
Minolta Cameras	26
Model Film Laboratory	129
National Camera Repair School	132
National Photo Coloring School	128
Nega-File Co., The	109
New York Institute of Photography	10, 11
Olden Camera & Lens Co.	98, 99
Omic Rectaflex	44
Paillard Products, Inc.	59
Panoram Film Labs	131
Peerless Camera Stores	39, 40, 41
Penn Camera	55
Photography Annual	115
Polaroid Corp.	17
Popular Photography	123, 139
Rabinovitch Photography Workshop	126
Ray-Vogue	126
Riken Optical Industries Ltd.	54
Ritz Camera Centers	104, 105
Russ Photo Service, A.	119
Servicemens Color Print Co.	131
Solar Cine Products, Inc.	119
Spiratone, Inc.	46, 47
Sterling Howard	7
Superior Bulk Film Company	125
Supreme Photo Supply Co.	57
Sylvania Electric Products Inc.	53
T V Workshop	119
Ta-Mar, Inc.	127
Three Dimension Company	111
Tiffen Marketing Company	38
Travelworld, Inc.	126
Voigtlander	27
Western Photo Sales	129
Weston Exposure Meters	109
Willoughby's	43, 51, 113
Zeiss, Inc., Carl	14, 49

GOING SOMEWHERE?

Let us help you plan and prepare for your next trip with this brand new monthly service for our readers. All you have to do is fill in the information we need, and mail to:

Travel & Resort Dept. 9
Popular Photography
366 Madison Ave., New York 17, N. Y.

I am going to take a trip in the near future to .....

I would appreciate travel and picture information about .....

..... in addition to information about possible scenic routes on way.

I plan to travel by ☐ Automobile ☐ Railroad ☐ Airline ☐ Bus —Check one or more.

Please advise about hotel or motel accommodations. ☐ Yes, ☐ No.

I own the following camera(s) .....

I plan to take ☐ Color ☐ Black & White.

Name .....

Address .....

City ..... Zone ..... State .....

SENSATIONAL OPTICAL BARGAINS

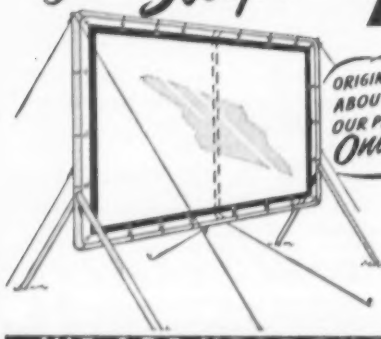
Last Minute! Scoop!

WAR SURPLUS! TERRIFIC BARGAIN!

7½' x 10' PROJECTION SCREEN

FOR OUTDOOR OR INDOOR USE

(Show your movies and Kodachromes outdoors in your yard)



ORIGINALLY COST ABOUT $182.00 OUR PRICE Only $50.00

Complete with frame and supports, guy ropes, stakes and packing chest. Used by Army for outdoor movies.

Maximum height overall 13'7", overall width 10'6".

Effective picture area 7'1"x9'5"! Screen size 7'6"x10'. Frame size 8'1"x10'6". Wonderful bargain for camps, church groups, lodges, other organizations! A screen this size would cost several hundred dollars if purchased commercially.

Easy To Set Up—Compact For Storage

The sturdy tubular framework is collapsible, yet you don't need even a screwdriver to set it up. Erected in a matter of minutes by one or two men. When used outdoors, stakes and guy ropes keep it steady even in a strong wind. Completely water resistant, completely fungus-proof! The screen cloth will not crack even after hundreds of foldings and unfoldings. Stows away compactly in a metal-bound chest 9x12x46", which is supplied with the screen.

The screen is attached to the frame by means of a number of springs, which keeps the screen taut and wrinkle-free. A reinforcing center frame gives extra support to the frame. This is a unit designed to give years of wear under hard usage!

MANY OTHER USES

Sign painting firms and concessionaires can use this screen as an easily erected movable sign for fairs, carnivals, church outings, etc. Home owners can convert them to awnings over patios which can be easily taken down and stored for the winter. (Paint them in bright colors to make them attractive!) They may also be used wherever large, unbroken areas are required—exhibit booths, display panels in stores, movable partitions, etc., etc.

Order one or more today! Only 150 available, so be sure to act fast! Condition: used but serviceable.
Stock No. 85,201P **$50.00**
f.o.b. Barrington, N. J. Shipping weight 75 lbs.

WE ARE HEADQUARTERS FOR ASTRONOMICAL TELESCOPE MAKERS

6" REFLECTOR ASTRONOMICAL TELESCOPE WITH TRIPOD. Equatorial mount Pyrex Parabolic mirror—60X and 120X eyepiece.
Stock No. 8,024-P ..... **$195.00 f.o.b.**

3" REFLECTOR ASTRONOMICAL TELESCOPE with mount and tripod—60X—knocked down, you assemble.
Stock No. 85,025-P ..... **$29.50 f.o.b.**

"MAKE-YOUR-OWN" 4¼" MIRROR KIT—Polished and aluminized mirror, lenses for eyepiece and diagonal. No metal parts.
Stock No. 50,074-P ..... **$16.25 Pstpd.**

3" ACHROMATIC OBJECTIVE—color corrected, air spaced 45" F.L. Unmounted.
Stock No. 30,186-P ..... **$28.00 Pstpd.**

RACK & PINION FOCUSING EYEPIECE HOLDER—1¼" I.D. for reflecting telescope.
Stock No. 50,077-P ..... **$9.95 Pstpd.**

Same as above FOR REFRACTORS.
Stock No. 50,103-P ..... **$12.95 Pstpd.**

6" ASTRONOMICAL TELESCOPE KIT.

Build Instrument worth up to $150.00. Grind your own mirror. Contains: Mirror blank, plate glass tool, eye-piece lenses, polishing pitch, abrasives, diagonal.
Stock No. 70,004-P ..... **$11.40 Pstpd.**

Imported ANASTIGMAT ENLARGING LENSES

Make your own enlargements. (See "Instruction Booklet" listing below Stock #9038-P.) It's a lot of fun and easy. Three popular sizes of high quality anastigmatic enlarging lenses. Coated for increased contrast, and to cut down exposure time. Corrected for color separation. Flat field. Excellent overall definition. Click stops. Iris diaphragm. Retaining ring for mounting. COVERAGE: 55MM size—35MM. 75MM size—2¼x2¼. 105MM size—2¼x3¼.

Stock No. 30,181-P—F/4.5—50mms focal length. Click stops 4.5-5.6-8-11 ..... **$10.50 Postpaid**
Stock No. 30,124-P—F/4.5—75mms. focal length click stops 4.5-5.6-8-11-16 ..... **$16.50 Postpaid**
Stock No. 30,125-P—F/4.5—105mms. focal length click stops 4.5-5.6-8-11-16-22 ..... **$19.50 Postpaid**

BUILD YOUR OWN! 35mm. Slide Projectors

Thousands of our customers have made their own projectors. Excellent results! Money saved! NOTE: We do not furnish metal parts except Kit #50,104-P contains mounted projection lens and focusing tube.

STOCK NO. 50,104-P ..... **$6.50 pstpd.**
Contains F/3.5 anastigmat projection lens in focusing tube, 2 condensers, heat absorbing glass, full instructions.

STOCK NO. 4029-P ..... **$2.85 pstpd.**
2 unmounted achromats for projecting lens, 2 condensers, heat absorbing glass.

Illus. Instruction Booklet 9014-P **30c**

INFRA-RED FILTER

Take Pictures at Night—in Movies, etc.

Fasten it over your flash reflector as an infra-red light source. For use with infra-red camera attachments, telescopes, etc. Light from your light source is filtered so that only infra-red light hits subjects. 5⅝" diam., ⅛" thick.
Stock No. 60,033-P ..... **$2.00 ea. Pstpd.**
Get booklet—Infra-Red Light and Its Uses.
Stock No. 9040-P **75c**

f/1.4 16mm MOVIE PROJECTION LENS

F. L. only 1" . . . or ½ that of standard 16mm projecting lens. Gives you a big picture—4 times the size normally obtained in same projecting distance. This is a 6 element coated lens manufactured for use in an expensive Juke Box Projector. Would normally retail for about $30.00. Lens unit mounted in a standard sleeve with an O. D. of 1 5/16" which fits most 16mm projectors. Brass tubing available to change O. D. for adapting to other sizes from 1" to 1½". Direction sheet included. Back of this lens must come to within ⅝" of film. Excellent for making your own projector taking Viewmaster-size film, or for making a contour projector.
Stock No. 30,119-P ..... **$9.50 Pstpd.**
Sleeve Adapter, 1" O. D.
Stock No. 40,126-P ..... **$1.00 Pstpd.**

TEMPERED HEAT ABSORBING GLASS

Flat polished discs of specially treated glass designed to absorb heat from optical systems of projectors, enlargers, etc. Not mounted, 5/64" thick. You can't buy it at a lower price!
Stock No. 4070-P (2⅜" dia.) ..... **$1.50 ea. Pstpd.**
Stock No. 4071-P (2¼" dia.) ..... **$1.50 ea. Pstpd.**

SPECIAL CLEARANCE SALE!

All First Quality. Brand New Make—We're simply overstocked! Money-Back Guar.

7 x 35 I.F. BINOCULARS (Japan) NEW, MAGNESIUM FEATHERWEIGHT! (Reg. $54.50)
Stock No. 1510-P ..... **$32.00 Pstpd. Tax Incl.**

7 x 50 MONOCULAR (American) (Reg. $25.00)
Stock No. 50,003-P ..... **$15.00 Pstpd.**

20X TELESCOPE (Reg. $7.95)
Stock No. 50,009-P ..... **$4.00 Pstpd.**

ALARM WRIST WATCH (Reg. $49.50)
Stock No. 50,030-P ..... **$29.50 Pstpd.**

6X PEN TELESCOPE (Reg. $3.95)
Stock No. 30,029-P ..... **$2.25 Pstpd.**

50X PEN MICROSCOPE (Reg. $3.49)
Stock No. 30,013-P ..... **$2.25 Pstpd.**

80X BABY MICROSCOPE (Reg. $4.00)
Stock No. 50,000-P ..... **$2.00 Pstpd.**

FIELD GLASSES—2½ x 35 (Reg. $4.75)
Stock No. 1530-P ..... **$3.00 Pstpd.**

SPITZ JR. PLANETARIUM

Fascinating! Instructive!

Amazing! Projects on ceiling of darkened room nearly 400 stars, more than 70 constellations in proper relation. No batteries; uses home current. Rheostat control for brightness. About 14" high on a 7"x7" base. Projection sphere 7" diameter. 32-page information book included FREE!
Stock No. 70,040-P ..... **$14.95 Pstpd.**

IRIS DIAPHRAGM

Imported from Germany. Low cost. Use for building enlargers, cameras, optical instruments, etc. With handle. O.D. 2¼". Maximum aperture—1⅝". Minimum aperture—⅛".
Stock No. 30,118-P ..... **$4.50 P.P.**

SIMPLE LENS KITS!

Fun for adults! Fun for children! Kits include plainly written, illustrated booklet showing how you can build lots of optical items.
Stock No. 2-P—10 lenses ..... **$ 1.00 Postpaid**
Stock No. 5-P—45 lenses ..... **$ 5.00 Postpaid**
Stock No. 10-P—80 lenses ..... **$10.00 Postpaid**

INSTRUCTION BOOKLETS

Easy to follow—accurate—8½ x 11 page size—many illustrations. Do-it-yourself—Save! and have Fun!

	Stock No.	Price Pstpd.
How to Build Projectors	9014-P	30c
Homebuilt Telescopes	9006-P	40c
Method to Clean Precision Optics	9024-P	15c
Homebuilt Riflescopes	9018-P	40c
NEW—JUST ISSUED		
How to Condense and Project Light with Lenses	9044-P	75c
Bifocles and Their Uses	9039-P	45c
ULTRA CLOSE-UP Photography	9042-P	60c
Infra-red Light and Its Uses	9040-P	75c
Homemade Stereo-Adapters	9032-P	30c
Homemade Stereo-Viewers	9034-P	30c
Photo Micrography with Pen Microscope	9029-P	10c
Dummy Cameras	9035-P	20c
Collimating Systems	9031-P	15c
"Building a Condenser Enlarger"	9038-P	40c

"ALL ABOUT TELEPHOTO LENSES"

31 pages—wealth of information, diagrammed instructions. Tells how to build Telephoto attachments—how to use them. Lots of other good dope on Telephotography.
Stock #9036-P ..... **60c Pstpd.**

15 POWER SPOTTING TELESCOPE

Complete with Tripod and Swivel Head. Prism erecting system. Sharp clear image. Ramsden eyepiece. Coated achromatic objective lens. Max. length 7¼". Tripod is 8½" high. This price possible because war surplus material was utilized in construction.
Stock No. 70,036-P ..... **$19.95 Pstpd.**

New! 2 in 1 Combination! Pocket-Size

50 POWER MICROSCOPE and 10 POWER TELESCOPE

ONLY **$4.50** ppd.

Useful Telescope and Microscope combined in one amazing, precision instrument. Imported! No larger than a fountain pen. Telescope is 10 Power. Microscope magnifies 50 Times. Sharp focus at any range. Handy for sports, looking at small objects, just plain snooping.

Order Stock #30,089-P. $4.50 ppd. Send Check or M.O.

Satisfaction Guaranteed!

LOOK! Best results in viewing "Photography Magazine" Stereo Pictures. Use Stock #40,041-P—3" x 4", listed below. First Surface Mirrors eliminate reflections.

FIRST SURFACE MIRRORS

40,040-P	2 x 3"	$0.80 Pstpd.
40,041-P	3 x 4"	1.10 Pstpd.
40,042-P	4 x 5"	1.80 Pstpd.
40,043-P	5 x 7"	3.15 Pstpd.
40,067-P	8 x 10"	5.50 Pstpd.

WRITE FOR FREE CATALOG-P

Huge selection of lenses, prisms, war surplus optical instruments, parts and accessories. Telescopes, microscopes, binoculars. Hand spectroscopes, reticles, mirrors, Ronchi rulings, dozens of other hard-to-get optical items. America's No. 1 source of supply for Photographers, Hobbyists, Telescope Makers, etc.

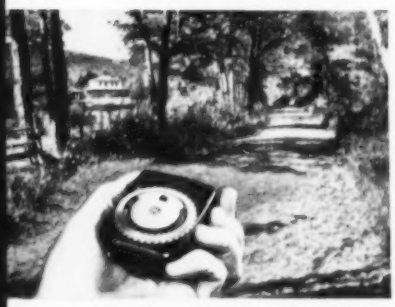
Ask for catalog P

ORDER BY STOCK NUMBER . SEND CHECK OR MONEY ORDER . SATISFACTION GUARANTEED!

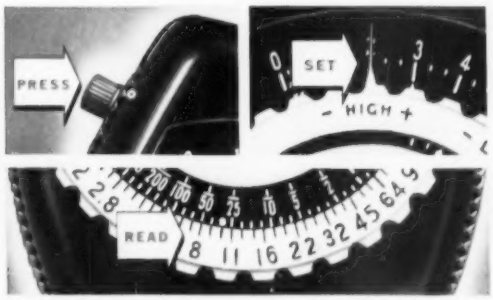
EDMUND SCIENTIFIC CORP., BARRINGTON, NEW JERSEY

WITH FEATURES FOUND ONLY ON G-E PR-1 METER, YOU QUICKLY AND EASILY BALANCE BRIGHT COLORS AND SHADOWS FOR BEST PICTURE RESULTS

Over and over, you get better pictures easier with exclusive features of G.E.'s PR-1 meter



METER WITH A MEMORY, General Electric PR-1 has *unique* pointer lock which holds reading. Gives you one-hand operation, eliminates need to see light scale.



EASY-TO-USE, you just *press*, *set*, and *read* G-E PR-1 for exact exposure setting, quickly and simply. Meter has clear, easy-turn dial calibrated in ASA numbers for faster readings, more accurate camera settings with all films.

INDOORS OR OUT, automatic range shift, *exclusive* on G-E PR-1, adjusts meter for high or low light. Expanded scale registers greater sensitivity; rugged case protects PR-1 from accidental shock.

COMPLETE METER, for professional or amateur, G-E PR-1 measures incident, reflected light for color, black-and-white film, movies, stills. No "extras" to buy. At your photo dealer's **$32.50†**

For free leaflets...
with more information on the General Electric PR-1 and Mascot exposure meters, write Section 583-6, General Electric Company, Schenectady 5, N. Y.
†Fair Traded

GENERAL ELECTRIC MASCOT* METER
The meter *everyone* can use. *Instantly* gives correct exposure reading. Needle points directly to proper camera setting. Ideal for color slides, movies, stereo. Compact, easy-to-use. At your photo dealer's . . . . only **$15.95†**
**Reg. Trade-Mark of General Electric Company*

Progress Is Our Most Important Product

GENERAL ELECTRIC

Now there are three Signets!

We gave the name "Signet" to our famous Kodak Signet 35 Camera. And now we've given it to two brilliant new projectors, the Kodaslide Signet 500 and 300. For they go hand in hand, these three . . . for the finest in color transparencies and in 2 x 2 slide projection.

Take the camera. Money cannot buy a finer lens. It's a Kodak Ektar *f*/3.5. And, to make sure you get full value from its sharpness and color correction, we put it in a smooth, *ball-bearing* mount, and add an exceptionally precise rangefinder with which to focus it—as close as two feet, lens to subject!

And the projectors. They give you power where it counts—*on the screen*. With the Kodaslide Signet 500 Projector you can even leave some of the room lights on. And the special impeller-type blower operates at a mere whisper.

If you're a photographer who makes no compromise with quality, bring the Signets into your work. Let your Kodak dealer show you transparencies made with a Kodak Signet 35—and screen pictures with a Kodaslide Signet Projector. Then you'll see.

Prices include Federal Tax and are subject to change without notice.

Kodak
TRADE-MARK

Kodak Signet 35 Camera—Kodak Ektar *f*/3.5 Lens, *Lumenized*. Coupled, combined rangefinder and viewfinder. Kodak Synchro 300 Shutter. Ball-bearing lens mount, double-exposure prevention, automatic film stop and film count. New low price, $75.

Kodaslide Signet 500 Projector—Close-coupled *Lumenized* condenser system. Snap-action slide feed. Automatic slide stacking. Accepts Airequipt Changer. Slide recall lever. 500-watt bulb. With *f*/3.5 lens, $72.50; with *f*/2.8 lens, $79.50. **Kodaslide Signet 300 Projector** with 300-watt bulb and *f*/3.5 lens, $59.50.

EASTMAN KODAK COMPANY, Rochester 4, N. Y.